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DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1989

HEARINGS

BEFORE A

SUBCOMMITTEE OF THE
COMMITTEE ON APPROPRIATIONS
UNITED STATES SENATE

ONE HUNDREDTH CONGRESS

SECOND SESSION

ON

H.R. 4781

AN ACT MAKING APPROPRIATIONS FOR THE DEPARTMENT OF DEFENSE FOR THE FISCAL YEAR ENDING SEPTEMBER 30, 1989, AND FOR OTHER PURPOSES

PART 1 (Pages 1–725)

GUARD AND RESERVE READINESS
OVERVIEW OF ARMY BUDGET
OVERVIEW OF DEFENSE BUDGET
OVERVIEW OF NAVY BUDGET

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DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1989

THURSDAY, MARCH 3, 1988

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 9:58 a.m. in room SD–192, Dirksen Senate Office Building, Hon. John Stennis (chairman) presiding.

Present: Senators Stennis, Johnston, Sasser, Stevens, D'Amato, and Kasten.

DEPARTMENT OF DEFENSE

DEPUTY SECRETARY OF DEFENSE

STATEMENT OF THE HON. WILLIAM H. TAFT IV, DEPUTY SECRETARY OF DEFENSE, U.S. DEPARTMENT OF DEFENSE

OVERVIEW OF DEFENSE BUDGET

OPENING STATEMENT OF CHAIRMAN STENNIS

Chairman STENNIS. Ladies and gentlemen, we will start just a couple of minutes ahead of time here. There is an uncertainty about the votes that may occur on the Senate floor this morning.

All of us are anxious for Mr. Taft to come and testify and give us the benefit of his opinion and suggestions, not only for those who can be here today, but all members of the committee. And further than that, it is for the benefit of the public as a whole, and will be in a recorded form where it will be available to anyone.

So for that and other reasons, Mr. Taft, we are delighted to have you here today. These are crucial times. It is a time of expenditure of a great deal of money, as we all know. Maybe things are going a little better right now, but it will continue to involve a great deal of planning from both military and civilians.

We do not have any money to spare, so we are going to listen closely to what you have to say. You have impressed us favorably in this field since you have been here. But we are not here today to pass compliments along.

PREPARED STATEMENT

This is the first meeting we have had this year before the entire Defense Appropriations Subcommittee, and I am just going to ask consent here to put a few observations and questions that I have in the record. We will proceed now with Mr. Taft's direct testimony.

[The statement follows:]

PREPARED STATEMENT OF HON. JOHN C. STENNIS

U.S. Senator From Mississippi

Good morning.

I want to welcome you to the first meeting of the Defense Appropriations Subcommittee for 1988.

Today, the Defense Appropriations Subcommittee has its first hearing on the Defense budget. Our witness, the Honorable William H. Taft, Deputy Secretary of Defense, will present an overview of the Defense budget. The members of the subcommittee are looking forward to a presentation by Secretary Taft on the major policy decisions and trade-offs that are reflected in this budget.

The next subcommittee hearing with Secretary of the Army and Army Chief of Staff will be the first in a series of overview hearings with the leaders of each of the military services and the reserve components. Later, the subcommittee plans a series of hearings on major Defense issues facing Congress in 1988, and will conclude with the Secretary of Defense currently scheduled for May 10.

The Defense budget submitted by DOD is unique in that it has the lowest funding increase ever proposed by the current administration and the first budget proposed with real decline of about 1 percent in spending resources.

In November 1987, the congressional leadership and the President agreed upon budget levels for national defense for both 1988 and 1989. The budget that DOD is now presenting is consistent with the funding levels agreed upon in the budget summit agreement which totals $299 billion.

For the Defense Appropriations bills, DOD has requested $291 billion in budget authority for 1989. This request represents a real decline of about 1 percent from what was appropriated by Congress in 1988.

In producing a budget for 1989 in conformance with the summit agreement, DOD reduced the originally planned 1989 budget from $323 billion to $291 billion, a reduction of 10 percent. In making this reduction, DOD has chosen to:

- reduce force structure, including ships, tactical fighter aircraft and Army combat units
  (includes reductions such as 16 frigates, one strategic submarine, one Naval air wing, two Air Force tactical fighter wings, and one Army Brigade.)
- reduce active duty military strength
  (includes reductions of 9,000 in the Army, 9,000 in the Navy and 25,000 in the Air Force)
- terminate acquisition programs
  (including Aquila RPV,A6F aircraft and ASAT)
- defer initiation of new acquisition programs
  (includes LHX helicopter, and Army Data Distribution System)

There has been some concern expressed about some of the choices made by the Secretary of Defense in preparing the budget, especially those concerns expressed by militaryservicei leadership.

Secretary Taft, we know that these issues were specifically addressed by you and Secretary Carlucci in preparing the 1989 Budget, and we want to hear your views on them.

BUDGET AMENDMENT TO SUMMIT AGREEMENT

Chairman STENNIS. All right, Mr. Taft, if you will proceed.

Mr. TAFT. Thank you, Mr. Chairman, and it is a privilege to appear before this subcommittee and to testify on the fiscal year 1989 defense budget.

As you know, Mr. Chairman, this budget represents an amendment to the second year of the 1988-1989 budget that we submitted a year ago. We have amended that submission to conform to the budget summit agreement that was reached between the administration and the Congress last November.

That agreement called for budget outlays of some $294 billion in fiscal 1989 and budget authority of $299.5 billion, and we have conformed, as I say, to those numbers.

Mr. Chairman, I have a rather extended statement which I think does contain important information, but is too long to review in its entirety here. I would like, if I may, to submit that for the record and, in place of that, just to review about a dozen charts which I think would present the highlights of that statement.

Chairman STENNIS. What was your last point there?

Mr. TAFT. I would like to speak to about a dozen charts that I have here. I have a full statement with perhaps as many as 30 charts, which I would like to submit for the record, if I may.

Chairman STENNIS. Very well, without objection, the admission to the record for the purposes stated will be allowed, of course, and we are glad to have it.

[The statement follows:]

PREPARED STATEMENT OF HON. WILLIAM H. TAFT, IV

DEPUTY SECRETARY OF DEFENSE

Introduction:

Mr. Chairman and distinguished members of the Committee, I appreciate this opportunity to be here to discuss the President's amended FY 1988/FY 1989 defense budget. For the past two weeks, Secretary Carlucci has appeared before four Congressional defense oversight committees and subcommittees. He has described in very objective and reasoned terms the adjustments we were required to make to the biennial defense budget to meet the bipartisan summit funding targets and the effect such adjustments will have on the security of our nation. Today, I will reiterate those points and underscore what I believe to be the most crucial issues facing us today concerning our security in the future.

Before I begin, however, I would like to say a few words about the process we have been engaged in for the past few months to fulfill the terms of the agreement that the President reached with the Congress. Essentially, this agreement involves the reduction of some 10 percent to the FY 1989 request we submitted to you last year. To say that this was easily done or that it was a good idea to undertake this effort in a short period would be quite inaccurate.

It was a very difficult and complex exercise. We only had five working weeks to reduce our FY 1989 program by $33 billion. Contrary to what some seem to believe, there were few short-term, quick fixes available to us. Tough choices had to be made and priorities had to be set. It is also obvious that funding constraints will be with us for some time. Therefore, our decisions had to be made so that we would be able to field a balanced, adequately-equipped force able to provide a credible response to aggression over the long term.

We could not afford to make capricious decisions. We were keenly aware that the reductions we had to make would result in a defense program that will have more risks than we would like, and a smaller, less capable force than we believe prudent. Our challenge was to accommodate these reductions without compounding the danger of this greater risk by returning to the "hollow" force structure of the late 1970s. To do this we had to terminate or defer programs we believed to be important components of our overall defense structure.

Many of the choices we made no doubt will prove unpopular to some constituency and you can be sure that we would rather not have had to make them. However, just as we provide an objective evaluation of the threats to our security, we recommend the best level and mix of forces to counter those threats, based on that evaluation and within the constrained resources provided by the budget summit agreement.

The amended FY 1989 budget you have before you today preserves the gains we have made and minimizes the increased risks we have had to accept. However, if the Congress chooses not to abide by the agreement and endeavors to rewrite this budget based only on parochial interests, we may very well find ourselves simply incapable of sustaining our responsibilities. We must all demonstrate a willingness to share the responsibility for the protection of this nation and its democratic principles.

The Budget Summit Agreement

Last January the President submitted a biennial defense budget for FY 1988/FY 1989. Biennial budgeting, which was recommended by the President's Commission on Defense Management and required by the FY 1986 Defense Authorization Act, represents a serious effort to promote stability and consistency in our defense program. Had our two-year request been enacted, it could have afforded the Department significant opportunities to realize savings and other benefits from assured procurement quantities and approved levels of effort. However, that integrated two-year program was deemed not affordable by the Congress and ultimately rejected. Nevertheless, we intend to continue biennial budgeting and will submit an FY 1990/FY 1991 budget next year.

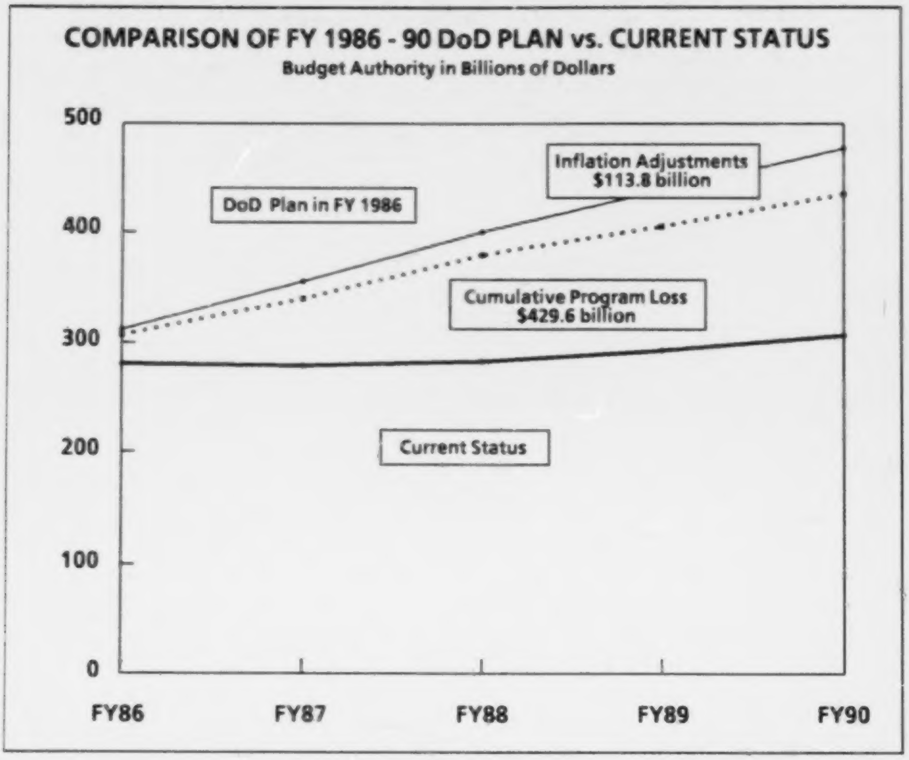
After deliberating on our request for nearly nine months, the Congress joined the Administration in a "budget summit" to end the budget gridlock. In late December, the Congress enacted and the President signed defense appropriations for FY 1988 consistent with the budget summit agreement, which provided budget authority of $283.2 billion. This level is $20 billion lower than we recommended, but was preferable to sequestration.

The budget summit also provided for budget authority of $290.8 billion for FY 1989. The Administration has honored the budget summit agreement in the amended FY 1989 Defense Budget request, even though it provides $32.5 billion less than we requested in last year's two-year budget and represents a 0.7 percent real decline from FY 1988.

FY 1989 AMENDED DoD BUDGET
BUDGET AUTHORITY & OUTLAYS
(Current $ Billions)

	FY 1986	FY 1987	FY 1988	FY 1989
BUDGET AUTHORITY	281.4	279.5	283.2	290.8
% Real Growth	-4.2%	-3.3%	-2.9%	-0.7%
OUTLAYS	265.6	274.0	277.3	285.5

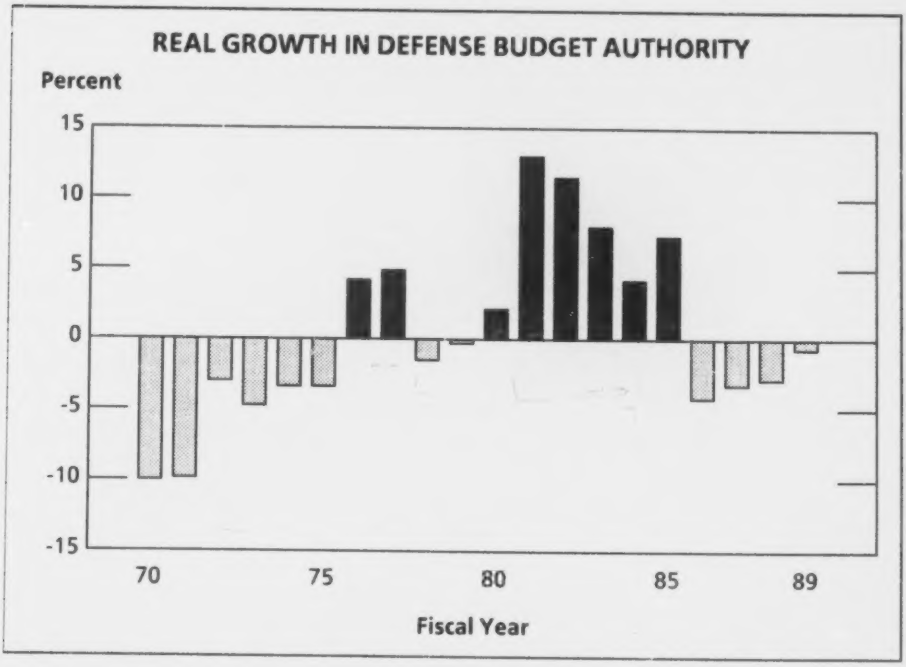
We cannot ignore that the summit figures for defense continue the downward trend, in real terms, of the last 3 years. The ultimate consequence of this decline, should it continue, will be the erosion of the improved capability we have achieved and the probability that we will be forced to rebuild our defenses again, but at a much higher cost.



The impact of this downward trend is seen clearly when considered in terms of the total reductions to our defense plan made since 1986. Since first proposed in our FY 1986 budget request, we have had to cut $543.4 billion from our FY 1986-90 five-year program. Even after adjusting for the benefits defense gained from lower inflation, we lost, or had to defer beyond 1990, $429.6 billion in planned defense programs.

Revitalizing Defense

It is important to understand the resources and effort that were required to overcome defense underfunding during much of the 1970s to appreciate fully the difficult challenges we faced in adjusting our current budget. Then, annual double-digit price increases were driving up the cost of government, especially in entitlement programs, and fiscal restraint was decreed for all areas of federal spending. Unfortunately, reducing the defense budget became the primary means of lowering federal expenditures and, consequently, real defense spending declined by over 20 percent from 1970 to 1980.



The failure to provide adequate defense resources left us with a force structure insufficient to meet the requirements of our military strategy. In addition, these defense reductions did not contribute appreciably to keeping overall federal expenditures in line since non-defense spending kept rising. Furthermore, while America was cutting back on the resources it devoted to defense, the Soviet Union was engaged in an ambitious and sustained program to expand and modernize its military forces. Thus, paring America's defense resources proved not only an ineffective economic policy, but also an unsound national security policy.

In 1981, President Reagan initiated a commitment to preserve peace, protect freedom, and guarantee security for the free world by increasing defense budgets and restoring our forces. It has taken seven years and nearly $2 trillion to restore the defense capability our security requires -- a well-manned, well-equipped, balanced structure of strategic, general purpose, and special operations forces capable of deterring aggression across the entire spectrum of conflict. Our more robust military posture promotes our leadership among allied and friendly nations and is fostering arms reductions agreements.

Now it appears that we have come full circle as once again domestic economic considerations are dictating the level of defense spending. This time reducing the federal deficit is the primary objective in setting the level and allocation of federal resources. Congressionally-approved levels of defense funding have decreased in real terms for the past three years, for a cumulative reduction of 10 percent from 1985 levels. As a result, we are again witnessing the consequences of defense underfunding through the reemergence of problems in our force readiness and modernization.

Of greater concern is that we may be moving toward another "decade of neglect" of our military capabilities.

The absence of prompt and decisive congressional review of defense budget requests has complicated our difficulties. Delay and vacillation have become the norm as issues other than national security have dominated the defense budget deliberations. Appropriation committees often ignored mandated budget resolution levels and did not appropriate at either authorization or resolution levels. Further, authorization and appropriation legislation has become burdened with restrictions on subjects ranging from contracting procedures to arms control. Such budgetary disorder is not conducive to making sound defense budget and program decisions affecting the nation's security.

This combination of unstable, inconsistent defense funding and budgetary disarray, has underscored the reality that improvements in defense capabilities are perishable -- they cannot be preserved without sufficient resources -- and insufficient support for defense increases the risk to our security. We must be able to acknowledge the important lessons from the past to make the right decisions for the future. We must ensure that we have the military capabilities necessary to support our deterrent strategy and keep risks to our security at a prudent level. Our current economic considerations are serious, but so are our nation's requirements for a strong defense. I hope we have learned the lesson that, even in the most troubling of economic times, we must have a strong defense; we cannot afford not to.

Defense Strategy

Our defense strategy seeks to deter aggression by making the penalties of such action exceed expected gains. Integral to deterrence is the assurance that the United States possesses both the means and the will to respond effectively to aggression regardless of its form. While we emphasize our resolve and ability to respond to aggression against our interests, we also avoid specifying the nature of our response. This is the essence of the doctrine of "flexible response" that serves as the foundation of U.S. and NATO strategy.

Since the beginning of the nuclear era, our deterrence has been based on the threat of nuclear retaliation against those who would employ nuclear forces against us or our allies. At the same time, efforts to develop a defense against nuclear attack played an important role in our strategy until the late 1960s when interest in this concept was dampened by the rapid buildup of Soviet nuclear forces and the lack of progress on technologies for strategic defenses in the United States.

In the early 1980s, the Reagan Administration placed a priority on strategic defenses. In 1983, President Reagan announced the Strategic Defense Initiative (SDI) intended to determine the feasibility of deploying an effective defense against nuclear ballistic missiles. The progress being made in this area may provide the option to begin deploying the first phase as early as the mid- to late-1990s.

In spite of our optimism for the successful development of an effective strategic defense system and the possibility of deep reductions in offensive strategic nuclear forces, it is still critical that we maintain our nuclear deterrent and strong conventional forces. Nowhere is this more important than in our support for and participation in the NATO alliance. The recent successful intermediate-range nuclear forces (INF) negotiations demonstrate the importance of our continuing effort to modernize and strengthen NATO's nuclear and conventional forces.

In 1983 NATO Defense Ministers agreed at Montebello to modernize theater nuclear forces. Major programs stemming from the Montebello Decision that have a direct bearing on the United States include:

- Modernization of NATO's dual-capable aircraft and their nuclear bombs;
- Development of a tactical air-to-surface missile to replace a portion of the nuclear bombs delivered by U.S. and allied aircraft;
- Development of a follow-on system to replace the aging LANCE deployed with U.S. and allied forces; and
- Production of efficient modern nuclear artillery rounds.

Most of these systems are included in our FY 1989 Amended Budget. All will be given high priority as the Department reviews its defense plans and consults with other NATO governments. We are proposing that Congress lift the current limitation on nuclear artillery rounds. We also need removal of the restrictions on further development of ATACMs as a follow-on to LANCE.

NATO NUCLEAR & CONVENTIONAL FORCE IMPROVEMENT PROGRAM

THEATER NUCLEAR FORCES

Modernize NATO's Dual Capable Aircraft and associated Nuclear Bombs.

Develop a Stand-off Tactical Air-to-Surface Missile (TASM).

Modernize NATO's Artillery-Fired Atomic Projectile and .Seek removal of Congressional Restrictions on production of nuclear Artillery.

Develop a Follow-on to LANCE with increased range, improved accuracy, and improved operating characteristics.

CONVENTIONAL FORCES

Continue Procurement of modern systems such as M-1 Tanks, F-15 fighters, and AEGIS Destroyers.

Develop Reconnaissance RPV's.

Develop highly accurate conventional Cruise Missiles.

Procure TACIT RAINBOW defense suppression missiles.

Continue to procure AMRAAM, PHOENIX and third generation Anti-Tank Weapons.

Develop MLRS, ATACMS, JSTARS and new Stand-off Air-to-Surface Missiles (TASM).

Develop and procure Forward Area Air Defense Systems (FAADS) and Improved PATRIOT Missiles.

Continue development of MK-15 System for Aircraft Identification.

Another important part of our NATO Defense Program is the U.S. contribution to the Conventional Defense Improvements initiative launched by NATO in 1984. We must continue to modernize our conventional forces with new equipment to retain our technological edge on the battlefield. The M1A1 tank, F-15 fighter, and Aegis cruiser are examples of relevant procurement programs. We must also look ahead with research and development programs to further enhance our capability to conduct a flexible conventional response. We are developing tactical reconnaissance RPVs and highly accurate conventional cruise missiles capable of being launched from air and sea platforms to locate and strike critical targets deep in Warsaw Pact territory. Additionally, we plan to enter production in FY 1989 with Tacit Rainbow, a defense suppression missile, which will greatly increase our effectiveness against enemy air defenses.

To ensure an effective conventional capability, we must also support programs such as POMCUS, airlift, and sealift to enable us to achieve our goal of ten divisions in Europe ten days after mobilization. We must continue to develop and procure modern munitions such as AMRAAM, Phoenix, and third-generation antitank weapons. Our ability to attack second-echelon Warsaw Pact forces must be further developed with systems such as MLRS, ATACMS, JSTARS, and new standoff air-to-ground missiles, and the Joint Tactical Fusion Program. In the area of advanced cruise missile guidance, we are exploring several innovative technologies that we hope to incorporate in weapons production as soon as feasible. To control our air space and protect our aircraft we are continuing to improve, develop, and field modern air defense systems such as FAADS and Patriot. Our contributions to NATO Infrastructure are providing hardened aircraft shelters and essential facilities at collocated operating bases in Europe. In addition, we are working with our NATO allies to develop a common system for aircraft identification. We will continue to devote special attention to such programs as we seek to strengthen our conventional posture in Europe.

We are also pursuing our competitive strategies initiative with an initial focus on the European theater. The task force on Europe developed proposals to improve NATO's defense posture in areas involving Soviet command and control, and continuing Soviet air and ground operations. The proposals exploit the Soviet requirement for strict time management and maintenance of a high-operations tempo. NATO advantages in data automation and processing, target acquisition, and intelligence fusion and dissemination can take advantage of this dependence, providing for more effective use of NATO's conventional capabilities.

These competitive-strategy proposals to improve NATO's defense posture center on new and improved military capabilities that share a number of common characteristics; for example: various unmanned systems (e.g., surface to surface, precision stand-off, air-to-surface, and cruise missiles, drones, and RPVs), area munitions, various extended-range tube-launched projectiles, rapidly emplacable barriers, precision-penetrator warheads, and smart submunitions. The task force recommendations take advantage of advances in automatic data processing, intelligence fusion, and electronic miniaturization. Each of the recommendations can be enhanced through extensive use of low-observable technologies and an integrated command, control, and communications system. The greatest effect would be gained by synergistic employment of these capabilities in combination with a robust NATO-wide command and control system.

In addition to our commitment to NATO, our conventional forces are actively and visibly protecting our interests on a day-to-day basis elsewhere throughout the world. From our forces in the Persian Gulf to our forward-deployed forces in the Republic of Korea, U.S. general purpose forces, under the umbrella of a secure nuclear deterrent, are essential to the deterrence of war on the middle and high end of the conflict spectrum. Although structured primarily to counter the Soviet threat, conventional forces must also be prepared to deter or combat aggression at the lower end of the spectrum. It is in the low-intensity conflict environment that our general purpose forces have found themselves most actively engaged over the past thirty-five years.

Low-intensity conflict (LIC), in the form of terrorism, subversion, and insurgency, is and will continue to be a major threat to our security and interests around the world. Therefore, we are committed to the revitalization and reorganization of our Special Operations Forces (SOF) within the Department of Defense. FY 1989 is a critical year in our revitalization efforts, both in terms of the delivery of previously funded systems and new initiatives. We have institutionalized SOF within the Department through the creation of the U.S. Special Operations Command (USSOCOM), the establishment of an Assistant Secretary of Defense for Special Operations and Low-Intensity Conflict, and the creation of a Major Force Program for SOF.

Amended FY 1989 Budget

We are determined to continue modernization and development efforts so critical to our strategy. However, the resources provided in the summit agreement for FY 1989 do not adequately finance our requirements for national defense programs, given the commitments and threats we face. This gap between available resources and program requirements represents the level of risk we must assume in our defense strategy. It is clear that continuing limited resources for defense in the foreseeable future will make it more difficult to keep this risk at the absolute minimum. Therefore, it is of the utmost importance that the forces we have provide a convincing and effective deterrence, capable of carrying out credible responses. Otherwise, we would have "hollow" forces, leaving us with a "hollow" strategy. In the face of current and future constraints on defense resources, we have made decisions that we hope will avoid this dangerous situation. As a consequence, the amended FY 1989 DoD budget will support forces that are leaner, but not "hollow."

The amended Department of Defense budget request for FY 1989 conforms with the budget summit agreement allocations for national defense of $299.5 billion in budget authority and $294 billion in outlays. The Pentagon's portion of budget authority is $290.8 billion; $32.5 billion lower than the funds requested for FY 1989 in last year's submission. The balance of the $299.5 billion is allocated to the Department of Energy's nuclear weapon activities and other related national security activities. The FY 1988 budget of $283.2 billion enacted by the Congress was $20.1 billion lower than the President's request.

NATIONAL DEFENSE TOPLINE
(Current $ Billions)

	1988	1989	1990	1991	1992	1993
BUDGET AUTHORITY						
DoD	283.2	290.8	307.3	324.3	342.0	360.3
DoE & Other	8.2	8.7	9.1	9.4	9.6	9.9
TOTAL 050	**291.4**	**299.5**	**316.4**	**333.7**	**351.6**	**370.2**
OUTLAYS						
DoD	277.3	285.5	297.3	311.0	325.9	341.5
DoE & Other	8.1	8.5	8.9	9.2	9.5	9.8
TOTAL 050	**285.4**	**294.0**	**306.2**	**320.2**	**335.4**	**351.3**

This two-year reduction of over $52 billion to the planned defense program forced difficult choices among defense priorities. The only way to accommodate such large reductions and still maintain momentum in our efforts to modernize our military establishment was to eliminate force structure, terminate or defer uneconomical or marginal programs, and delay proposed new starts. Until we can reverse the downward spiral in defense appropriations, we must take every possible step to assure that the choices do not damage our military preparedness.

FY 1989 AMENDED BUDGET
BUDGET AUTHORITY BY MILITARY COMPONENT
(Current $ Billions)

	FY 1989 Request	FY 1989 Amendment	FY 1989 Revised	FY 1989 Real Growth
ARMY	84.7	-6.9	77.8	-0.7
NAVY	108.7	-12.3	96.4	-6.8
AIR FORCE	107.2	-10.0	97.2	6.6
DEFENSE AGENCIES	20.9	-2.6	18.3	5.6
DEFENSE WIDE	1.7	-0.7	1.0	-
TOTAL	**323.3**	**-32.5**	**290.8**	**-0.7**

The amended budget continues to reflect a balanced program among the Military Departments with the relative shares of the budget remaining relatively constant. The Navy reflects a lower level of budget authority in FY 1989 than in FY 1988 principally because the approved FY 1988 program fully-funded two aircraft carriers. Severe cuts in FY 1988 led to the Air Force increase in FY 1989 budget authority.

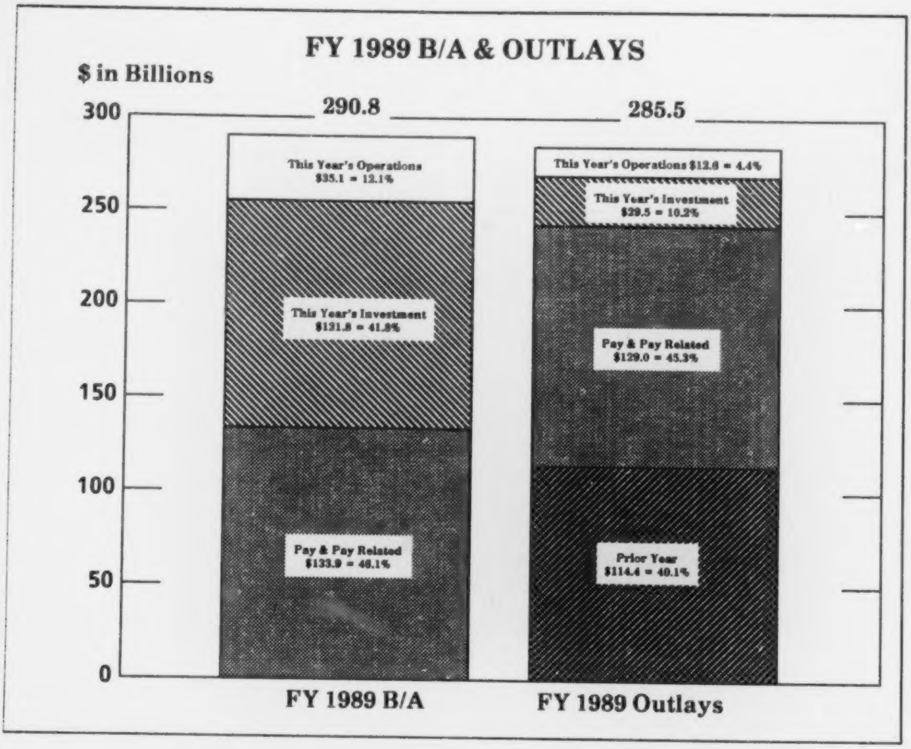
FY 1988 DoD BUDGET
BUDGET AUTHORITY BY TITLE
(Current $ Billions)

	FY 1988 Request	Congressional Action	FY 1988 Enacted	FY 1988 Real Growth
MILITARY PERSONNEL	78.3	-2.2	76.1	-0.3
OPERATION & MAINTENANCE	86.6	-5.9	80.7	-4.8
PROCUREMENT	84.0	-3.0	81.0	-2.5
R D T & E	43.7	-7.0	36.7	-1.0
MILITARY CONSTRUCTION - FAMILY HOUSING	10.1	-1.6	8.5	0.0
OTHER	0.6	-0.4	0.2	-
TOTAL	303.3	-20.1	283.2	-2.9

FY 1989 AMENDED BUDGET
BUDGET AUTHORITY BY TITLE
(Current $ Billions)

	FY 1989 Request	FY 1989 Amendment	FY 1989 Revised	FY 1989 Real Growth
MILITARY PERSONNEL	81.6	-3.2	78.4	-0.2
OPERATION & MAINTENANCE	91.5	-5.9	85.6	2.4
PROCUREMENT	94.6	-14.5	80.0	-4.3
R D T & E	44.3	-6.2	38.2	0.3
MILITARY CONSTRUCTION - FAMILY HOUSING	10.7	-1.7	9.0	2.5
OTHER	0.6	-1.0	-0.4	-
TOTAL	323.3	-32.5	290.8	-0.7

The amended FY 1989 budget by title reflects the Department's priorities in accommodating these large reductions. In the Military Personnel accounts, we have sought to preserve the significant gains experienced in recruiting and retention. The Operations and Maintenance and Military Construction titles are the only areas with real increases over FY 1988, which underscores the Department's concern about readiness. Procurement accounts have incurred the largest reductions since 1985. Eighteen existing development and procurement programs will be terminated in the amended budget. Also, this budget cannot afford to fund some previously planned new starts in research and development. This concerns us because the United States in the past has been able to counter the numerical superiority of Soviet weapons with more sophisticated technology. We cannot afford a trend that neglects the development of weapons for tomorrow's force.



The distribution of FY 1989 budget authority reflects the historical balance between people, readiness, and modernization. Of the $290.8 billion requested for the Department of Defense, roughly 12 percent represents costs associated with day-to-day operations, nearly 42 percent represents investment in research, development, and procurement of weapons and equipment, and over 46 percent is associated with civilian and military pay and related military personnel expenses.

DoD outlays in FY 1989 are projected to be $285.5 billion, $18.2 billion lower than that projected last year. New investment represents only 10 percent of projected FY 1989 outlays, compared to 42 percent of total requested budget authority. The nature of defense investment is such that production or construction occurs over a period of years with dollars disbursed as work is accomplished. As a result, 40 percent of projected FY 1989 outlays are associated with prior year commitments - ships, weapons, missiles, aircraft that are in the pipeline. It is this very fact that makes tailoring the defense budget to meet reduced outlay targets, as the budget summit requires, so difficult.

Force Structure Changes

ARMY FORCE STRUCTURE CHANGES
($ in Millions)

	Changes	
	Dollars	Manpower
•• Deactivate one Active Brigade of the 9th ID (Motorized) at Fort Lewis, Washington.	- 156	-3,133
•• Cancel planned FY 1989 Activation of two 6th ID (L) Battalions in Alaska.	- 72	-1,411
•• Deactivate the Army National Guard ROLAND unit in New Mexico.	- 38	-
•• Retire 170 OH-58/UH-1 Scout Aircraft	- 3	-
•• Retire 450 OH-58/UH-1 Utility Aircraft	- 119	-2,200
•• Reduce Administrative Support Personnel	- 132	-3,603
•• Reduce Temporary Civilian Hires at Logistic and Supply Operations	- 40	-
•• Reduce Civilian and Selected Reserves Strength	- 558	-36,569
TOTAL ARMY SAVINGS	- 1,118	-46,916

Significant force structure and program changes have been proposed that affect the near- and long-term risks associated with implementing national security policies. The budget reflects 18 active and 10 reserve divisions in the Army, and 3 active and 1 reserve divisions in the Marine Corps, the same as last year. Army active military end strength will be reduced by 8,600 soldiers compared to the original FY 1989 Department of Defense request. By the end of FY 1989 the Army will deactivate one brigade from the 9th Motorized Infantry Division at Fort Lewis, Washington, reduce the size of some administrative helicopter units, and reduce administrative personnel throughout the Army. Planned activation of two battalions of the 6th Light Infantry Division in Alaska will not occur in FY 1988 and FY 1989.

The Army aviation fleet will be reduced from more than 8,200 aircraft to less than 7,000 aircraft by eliminating 450 OH-58A and UH-1 helicopters by the end of this year, 170 helicopters in FY 1989, and another 742 over the next five years. The resulting fleet will be smaller but equipped on the average with newer and more capable aircraft.

Achievement in FY 1989 of the Navy's long-standing overall force goal of 600 ships has had to be deferred in order to allocate adequate funds to support fully a smaller force structure. The Navy will decommission one SSBN originally scheduled for overhaul. Fiscal constraints resulted in the proposed retirement of 16 frigates. These actions, along with other program adjustments, such as the congressionally-directed retirement of an SSBN in FY 1988, will result in an overall force of 580 deployable battle force ships at the end of FY 1989. The Navy will have to stand down the 14th carrier air wing, relying instead on the two reserve carrier air wings to support ship deployments. Navy active force military end strength will be reduced by 9,600 compared to the original FY 1989 plan. Marine Corps' end strength will be reduced

NAVY FORCE STRUCTURE CHANGES
($ in Millions)

	Changes Dollars	Changes Manpower
•• Retire 16 Frigates in FY 1988/FY 1989.	- 166	-4,400
•• Will not stand up the 14th Air Wing at Miramar Naval Air Station.	- 95	-1,600
•• Deactivate one Strategic Submarine.	- 116	-11
•• Decrease the Navy, Marine Corps and Navy Reserve Military, and Civilian End Strength.	- 372	-22,322
TOTAL NAVY SAVINGS	- 749	-28,333

by 2,900 active Marines and 900 reserve Marines by restructuring its combat units.

AIR FORCE FORCE STRUCTURE CHANGES
($ in Millions)

	Changes Dollars	Changes Manpower
•• Deactivate the 401st Air Wing in Spain.	- 15	-735
•• Deactivate the 474th Tactical Fighter Wing at Nellis AFB.	+ 57	-
•• Reduce SR-71 Program in FY 1989.	- 119	-527
•• Reduce 12 Guard and Reserve Tactical Fighter Squadrons from 24 to 18 Aircraft by end FY 1991.	- 5	-174
•• Deactivate two helicopter Equipped Tactical Air Support Squadrons.	- 4	-249
•• Convert an Air Guard RF-4C Recon. Squadron to a C-130 Tactical Airlift Squadron.	+ 5	-
•• Reduce Vandenberg to Mothball Status.	- 12	-
•• Reduce Military, Civilian, and Selected Reserve Strength.	- 533	-30,528
TOTAL AIR FORCE SAVINGS	- 626	-32,213

The Air Force will begin deactivation of two tactical fighter wings in FY 1989; the 474th at Nellis Air Force Base, Nevada, and the 401st at Torrejon Air Base in Spain. If we are successful in our efforts to locate a new base for the 401st in Europe, and we are making progress, we will nominate another wing for deactivation. The 401st is vitally important for NATO's deterrent. Additional aircraft in several different U.S.-based Air Reserve Force squadrons, equal to a third wing, are planned for elimination, which will reduce the total Air Force tactical fighter wing equivalents to about 35 from the current level of nearly 38. The Air Force also will begin the phase out of SR-71 aircraft as well as two helicopter-equipped tactical air support squadrons. Total active Air Force military personnel end strength will be reduced by 25,000 compared to the original FY 1989 defense request.

Program Adjustments

ARMY PROGRAM TERMINATIONS
(Current $ Millions)

	FY 1989	FY 1989 & BEYOND
AQUILA RPV	226	1,096
Anti-Tactical Missile	35	149
EH-60 Helicopter	45	45
Howitzer, M198	20	91
Mortar, 120mm	24	161
Copperhead	106	747
TOTAL	455	2,289

One of the clear implications of future defense levels is a continuation of constrained expenditures into the foreseeable future. For the Department of Defense, this means taking steps to ensure reduced spending levels in the outyears, including the elimination of some ongoing programs and force structure. Eighteen existing development and procurement programs are terminated in the amended budget, which will reduce FY 1989 funding requirements by nearly $4.8 billion dollars and save another $46.9 billion in the outyears.

NAVY PROGRAM TERMINATIONS
(Current $ Millions)

	FY 1989	FY 1989 & BEYOND
A-6F Aircraft	918	5,655
Naval Airship	62	135
Anti-Radiation Seeker	8	109
High Frequency Anti-Jam (HFAJ) Radio	52	87
5 Inch SAL GP	*	*
Skipper	37	209
TOTAL	1,077	6,194

* Not included in Original Biennial request

Programs were terminated for a variety of reasons. Some were cancelled because they were not affordable, such as the Army's Aquila Remotely Piloted Vehicle (RPV), 120 mm Mortar, and Copperhead projectile; the Navy's High Frequency Anti-Jam (HFAJ) Radio, Naval Airship, Skipper bomb, and 5" Guided Projectile; and the Air Force's Minuteman III Penetration Aids and Airborne Command Post System Replacement. Others were terminated because there are viable alternatives that satisfy mission requirements. The Army will upgrade the Patriot Missile in lieu of procuring the Anti-Tactical Missile; the Navy will upgrade the A-6E rather than produce the A-6F; and the Air Force will use existing chartered aircraft and cancel production plans for the C-27 aircraft. The

AIR FORCE PROGRAM TERMINATIONS
(Current $ Millions)

	FY 1989	FY 1989 & BEYOND
ASAT	786	2,218
Small ICBM *	2,150	39,790
Minuteman III PenAids	129	561
C-27 Aircraft	65	65
AGM-130	92	401
AIRBORNE COMMAND POST REPLACEMENT	14	140
TOTAL	3,237	43,175

* Budget includes $200 Million to protect the option of the next Administration.

Army terminated the M198 Howitzer and EH-60 helicopter since present forces will provide an acceptable capability. The ASAT missile program was cancelled due to continued congressional testing restrictions that preclude the benefits of further investment. Finally, the Air Force cancelled procurement of the AGM-130 powered GBU-15 because of technical problems.

ARMY PROGRAM DEFERRALS
(Current $ Millions)

	RDT&E	PROCUREMENT	TOTAL
Forward Area Air Defense C^2I	65	63	128
Advanced Anti-Armor Weapon-Heavy	92	-	92
Armored Family of Vehicles	45	-	45
LHX Helicopter Restructure	407	-	407
Army Data Distribution System	-	85	85
TOTAL	609	148	757

In addition to those programs scheduled for cancellation in the FY 1989 amended budget, research and development efforts or planned procurements have been deferred for technical reasons, congressional action, or unique program circumstances. Some programs have had to be restructured to respond to congressional direction, such as the Army's Advanced Anti-Armor Weapon-Heavy (AAWS-H) and the Armored Family of Vehicles. The Army Data Distribution System has experienced technical delays. The Navy's MK-48 ADCAP torpedo has experienced production delays, while the MK-50 torpedo and Vertical Launch ASROC have experienced development delays. The Air Force's Defense Meteorological Satellite program has been delayed. Total FY 1989 program deferrals in the amended budget reduce funding by $1.1 billion.

NAVY PROGRAM DEFERRALS
(Current $ Millions)

	RDT&E	PROCUREMENT	TOTAL
Advanced Air to Air Missile	57	-	57
MK 48 ADCAP Torpedo	-	111	111
MK-50 Torpedo	-	79	79
Vertical Launch ASROC	-	53	53
TOTAL	57	243	300

Eight programs scheduled as new starts in FY 1989 were delayed. Delayed to FY 1990 were the procurement of Non-Line of Sight Missile and the Light Assault Bridge/Launcher for the Army; the Navy's Low Cost Sonobouy, ASW variant of V-22, new warhead for MK-50 torpedo, and the Passive Signal Monitoring System; and B-1B Enhancements and the Sensor Fuzed Weapon for the Air Force. Delaying these programs reduced funding requirements in FY 1989 by over $400 million.

NEW STARTS DELAYED
(Current $ Millions)

	RDT&E	PROCUREMENT	TOTAL
ARMY			
Non-Line of Sight Missile	-	66	66
Light Assault Bridge/Launcher	-	6	6
NAVY			
Low Cost Sonobuoy	-	27	27
Passive Signal Monitoring System	-	40	40
ASW Variant of V-22	18	-	18
New Warhead for MK-50 Torpedo	8	-	8
AIR FORCE			
B-1B Enhancements	165	-	165
Sensor Fuzed Weapon	-	111	111
TOTAL	191	250	441

Amended FY 1989 Program Priorities

Manpower

Military and civilian manpower requirements are directly linked to force structure requirements. Therefore, revisions to force structure as a result of current funding constraints have also affected manpower levels. Congressional direction on officer reductions and provisions of the Goldwater-Nichols DoD Reorganization Act of 1986 have imposed other variables on the development of manpower requirements within the Department.

DEPARTMENT of DEFENSE MANPOWER
(END STRENGTH IN THOUSANDS)

	FY 1988	FY 1989
MILITARY ACTIVE DUTY		
FY 1988/FY 1989 BIENNIAL REQUEST	2,172	2,184
ARMY	-9	-9
NAVY	0	-9
MARINE CORPS	-2	-3
AIR FORCE	-23	-25
TOTAL ACTIVE DUTY REDUCTIONS	-34	-46
FY 1989 AMENDED REQUEST	2,138	2,138
SELECTED RESERVES		
FY 1988/FY 1989 BIENNIAL REQUEST	1,190	1,213
REDUCTIONS	-18	-40
FY 1989 AMENDED REQUEST	1,172	1,173
CIVILIANS		
FY 1988/FY 1989 BIENNIAL REQUEST	1,123	1,125
REDUCTIONS	-11	-23
FY 1989 AMENDED REQUEST	1,112	1,102

The amended budget supports a total force level of 2,138,000 full-time active duty personnel, a reduction of 46,100 from the force levels presented in the original FY 1989 budget submitted last year, and a total reduction of 35,917 from actual FY 1987 levels. Likewise, the reserve force total of 1,173,000 reflects a decrease of 40,500 end strength from the original FY 1989 budget but a total increase of 22,045 over actual FY 1987 levels. Civilian personnel end strengths have been reduced from 1,125,000 reflected for FY 1989 last year to 1,102,000 in the amended FY 1989 budget, a decrease of 23,000. The amended level represents a reduction of 30,884 civilian end strengths from actual FY 1987 employment levels. These reductions have been achieved through decreases in the force structure, consolidation of workload, and general reductions and will be accommodated through reduced accessions and early release of military personnel and attrition of civilians. Although force structure reductions do not save a great deal of money in the near term, they save money every year thereafter in increasing amounts as more infrastructure savings are identified.

We have witnessed some dramatic achievements in the area of military personnel over the last seven years. Continued success in recruiting and retention of military personnel have made the volunteer force a favorable and economical alternative to conscription. Improvements in pay and benefits, increased opportunities for women, and better living and working conditions have contributed greatly to the desirability of a military career. Also, continued congressional support for the Department's morale, welfare, and recreation program has contributed materially to our quality of life programs for service members and their families. FY 1987 was an outstanding year for recruitment. All Services met or exceeded their enlistment objectives and did so in spite of the shrinking pool of young people from which to recruit. Quantity has not been the only measure of success. The recruit today is of unprecedented high quality.

PEOPLE PRIORITIES

- **COMPENSATION --4.3% MILITARY PAY RAISE**
- **VARIABLE HOUSING ALLOWANCE INCREASE**
- **SELECTIVE REENLISTMENT BONUS**
- **SPECIAL & INCENTIVE PAYS**
- **CONTINUATION BONUS FOR AIR FORCE PILOTS**

We have made every effort in this year's budget to preserve the significant gains in recruiting and retention. Included in the budget are a 4.3 percent pay raise and a 3.4 percent increase in the Variable Housing Allowance (VHA) for our military personnel to be effective January 1, 1989. The military pay raises implemented early in this Administration served to help the military "catch-up" with the private sector in order to better compete in the labor market. As a result of improved pay and improvements in the area of benefits, including educational benefits such as the Montgomery GI Bill, the military became an attractive alternative for many young Americans and a career opportunity as well. Unfortunately, subsequent pay caps have seriously eroded those gains and today military pay raises are 11 percent behind private sector pay raises; worse than it was when this Administration first took office. The 4.3 percent pay raise included in this budget would roughly match projected private sector wage increases and prevent military pay from falling further behind.

The increase in VHA is intended to prevent further erosion in that important allowance. Because of congressional restrictions, VHA rates have not been increased since FY 1986 even though housing costs have gone up by 8.5 percent during that period. As a result, military members are now absorbing, on the average, over 22 percent of housing costs out of pocket, as compared to the 15 percent they are intended to absorb under statute. The VHA increase in the budget would keep the housing cost absorption from getting even higher.

Current officer retention is stable with the exception of two critical officer communities: nuclear trained naval officers and aviators. The enhanced Nuclear Officer Incentive Pay authorized by the Congress in 1986 is expected to reduce the shortage in nuclear trained officers. However, the demand and competition for aviators from commercial aviation is expected to continue to exacerbate the shortage in this community. Continuing existing incentives and considering other alternatives are important if we are to remain competitive in this area. In particular, we are considering a new initiative which would provide an aviation officer continuation bonus to Air Force pilots.

We have now implemented a congressionally-directed reduction of 2 percent of our officer corps. We are concerned that we not make any further arbitrary reductions and that we understand completely the impact of any officer reduction. We are currently studying proposed FY 1989-1990 cuts in concert with force structure reductions and will report the results of that study this month.

The budget reductions in civilian personnel end strength in FY 1988 and FY 1989 are primarily in the area of general base support and logistics activities. For the civilian workforce, the budget requests a 2 percent pay increase to be effective January 1, 1989. This is consistent with the Administration's government-wide request for civilian pay.

Operation and Maintenance

The emphasis placed on improving readiness is apparent in the Operation and Maintenance appropriations request of $85.6 billion. This reflects 2.4 percent real growth over FY 1988 approved levels and compares with the 4.8 percent real decline appropriated last year by the Congress. The outlay constraints in the budget agreement prohibited additional growth in readiness. Growth is reflected for operating tempo improvements and for increased depot maintenance efforts.

Additional funds have been requested to slow the rate of growth in the backlog of equipment waiting to be repaired. However, in order to provide the funding level required to maintain the readiness of the operating force, within the fiscal constraints of the FY 1989 budget, it has been necessary to reduce funds for base operations and general logistic support programs. Maintenance backlog levels will increase in both FY 1988 and FY 1989 as a result of budget limitations.

TRAINING PRIORITIES

- **MEET ARMY GOAL OF 850 TANK MILES FOR GROUND OPTEMPO.**
- **MEET NAVY GOAL OF 50.5 STEAMING DAYS PER QUARTER FOR DEPLOYED FLEET.**
- **MEET AIR FORCE GOAL OF 19.3 TACTICAL HOURS PER MONTH**

The FY 1989 budget restores ground and air training operating tempo levels for the Army and Air Force that had been reduced under FY 1988 fiscal constraints. The Army has maintained its operating tempo goals for FY 1989 of 850 training miles for major combat tracked vehicles and 15.8 flight hours a month for its aviation crews. Both the Army and the Marine Corps will maintain tactical unit proficiency through joint and combined training exercises at the National Training Center and the Marine Corps Air-Ground Combat Center.

While the projected naval force levels have been reduced in the near term, efforts have been made to protect readiness levels. By eliminating the operational support requirements associated with the 14th air wing, the Navy will be able to maintain its peacetime operating tempos at acceptable levels. Navy and Marine Corps tactical aircrews will average 25 hours of flying time per month in FY 1989, enabling them to maintain our readiness goals. The budget reflects operation of our naval forces at 50.5 steaming days per quarter for the deployed fleets, and 29 days for the home fleets. These levels are consistent with our operational goals. Continued high levels of operation in the Persian Gulf, however, may require funding to be redirected and result in a reduction in at-home training.

As with the naval forces, the reduced level of tactical air forces has permitted the Air Force to maintain its goal of 19.3 flying hours per month for tactical aircrews.

I cannot emphasize strongly enough that these levels of training must be funded. The Department has made the hard priority trade-offs to supply the resources for these levels and I urge you to support them. Training is the key to readiness and the maintenance of a quality force.

Procurement

The Department of Defense has funded, in the amended FY 1989 budget request, those systems and technologies critical to maintaining our superiority in weapons capabilities. The budget requests $80 billion for procurement programs, a 4.3 percent negative growth for the procurement title. Despite this overall drop in procurement, the Department of Defense, has attempted to fund major programs at the optimum economic level wherever technology or force requirements have made this desirable.

ACQUISITION PRIORITIES

- **AIRCRAFT**
  - **180 F-16**
  - **72 AH-64**
  - **72 UH-60**
  - **72 F/A-18**
  - **24 AV-8B**
  - **12 F-14**
  - **36 F-15**
- **MISSILES**
  - **815 PATRIOT**
  - **66 TRIDENT II**
  - **510 TOMAHAWK**
  - **12 PEACEKEEPER**

The amended FY 1989 request includes 429 fixed-wing aircraft and 188 helicopters. The increase in the aircraft program reflects higher funding for the B-2A bomber, the procurement of improved models of the F-16 fighter, an increase in the C-17 program from 2 to 4, and an increase in Air Force aircraft spare parts. Aircraft procurement levels reflected in the budget will maintain our goal of 10 years average age for tactical fighter aircraft. Reserve forces' modernization is being accelerated as more F-16s replace older model F-4s.

The Army sustains both AH-64 and UH-60 helicopter production at 72 per year and provides for an Army Helicopter Improvement Program (AHIP) to modify 24 OH-58 aircraft in FY 1989.

The Navy will, with congressional approval, upgrade a limited number of A-6Es in lieu of developing the A-6F model as previously planned. The Marine Corps has restructured its AV-8B program,

ACQUISITION PRIORITIES

- SHIPBUILDING
  - 1 TRIDENT
  - 2 SSN 688
  - 1 SSN-21
  - 3 DDG-51
  - 1 LHD-1
- LAND FORCES
  - 559 ABRAMS (M-1) TANKS
  - 581 BRADLEYS
- COMMUNICATIONS & ELECTRONIC EQUIPMENT UPGRADE

reflecting a 44 aircraft reduction under a multiyear procurement planned for FY 1989 through FY 1991. As directed by the Congress, the final 34 AH-1W Super Cobras will be procured by the Marine Corps in FY 1988 and will sustain the current Marine Corps attack helicopter forces into the 1990s. Initial long lead procurement funding for the V-22 Osprey tilt-rotor aircraft program is requested in FY 1989. This aircraft will provide significant increases in operational capability, reliability, and survivability for the Marine amphibious assault forces.

The increase in funding for missile programs reflects increased production quantities of AMRAAM, PHOENIX, STANDARD, and MAVERICK missiles and continues improvements in the accuracy, reliability, and survivability of our nuclear forces. While PEACEKEEPER missiles continue to be deployed in refurbished Minuteman silos in Wyoming, the longer term objective is to deploy PEACEKEEPERS in a basing mode that is more survivable, such as the rail garrison basing mode currently being considered. Only 12 missiles are requested in FY 1989 in recognition of congressional determination to approve no more than that level each year while decisions are pending on the basing mode. These twelve missiles will enter a pool of available test missiles while we work with the Congress to determine the appropriate basing mode. Once basing concerns are resolved, we would expect the Congress to insist on a more economical procurement level for these missiles.

The amended budget supports continued development of the Trident II (D-5) missile and production of 66 D-5 missiles. The D-5 missile will be deployed on the ninth Trident SSBN in late 1989. Production and deployment of the nuclear version of the Tomahawk sea-launched cruise missile continues in FY 1989 with a total complement of 758 to be deployed by the mid-1990s.

For the Army, no reductions were imposed on heavy armored or mechanized forces; those forces that would bear the brunt of combat with Warsaw Pact or comparably equipped opponents. The highest priority was given to procurement of 545 Abrams (M-1) tanks and 581 Bradley Fighting Vehicles.

The FY 1989 shipbuilding program includes $9.1 billion for the construction of 17 new ships and two conversions. The first of the improved SSN-688 class submarines equipped with the AN/BSY-1 submarine combat system will join the fleet in 1988 realizing our goal of 100 attack submarines. To maintain this 100-ship force, with its qualitative superiority over Soviet submarines, will require the continued procurement of three to four submarines a year. The FY 1989 budget requests 2 additional SSN-688 submarines as well as the first SSN-21 Seawolf attack submarine.

The amphibious assault force program remains unchanged from last year, with the fourth LHD proposed for authorization in FY 1989.

The amended FY 1989 budget contains three AEGIS destroyers. Higher rates of procurement of Antiair Warfare (AAW) ships, such as the DDG-51, will be necessary in the future to offset projected retirements of older AAW ships. In the area of mine warfare, the FY 1989 budget continues to reflect the second and third MHC-51 minehunters and the remaining 7 MH-53E helicopters. Finally, the FY 1989 budget requests funds for the second of four planned AOE-6-class fast support ships.

The MK-48 Advanced Capability (ADCAP) torpedo has completed a successful at-sea testing program and will proceed with limited production in FY 1989.

Research, Development, Test, and Evaluation

The FY 1989 RDT&E title request of $38.2 billion reflects no real growth over FY 1988 levels. Many programs have been restructured, reduced, deferred and, in some cases, terminated.

In the current resource environment, the Administration does not feel two mobile missiles to be affordable or cost effective. The PEACEKEEPER rail garrison concept is far more cost effective than Midgetman and is being fully funded. In the interest of maintaining a strategic consensus in the Congress, however, the budget proposes preserving the option of continuing the Small ICBM development program for a final decision by the next administration. The budget reflects the $700 million appropriated in FY 1988 and requests $200 million in FY 1989 to support continued development of the Small ICBM and its basing mode through FY 1989. No funds have been included in the outyears.

While the United States needs an operational ASAT to counter the Soviets and deter exploitation of their current monopoly, continuing congressional prohibition of testing of the air-launched miniature vehicle (ALMV) against targets in space has forced cancellation of the ALMV ASAT program. We believe the congressional restrictions represent an extremely unwise decision in terms of deterrent credibility, but we cannot afford to budget scarce resources on a program we are unable to test. The Soviets already have a deployed antisatellite (ASAT) system. Should the Congress allow us to test an effective deterrent to the Soviet ASAT capability, the Department would be prepared to reinstate the program immediately.

The MK-50 torpedo program, having been restructured in FY 1987, is now on track for fleet introduction in FY 1991. Development of the Sea Lance ASW standoff weapon has been limited to initial missile tests so that this program can be reviewed this summer before making any long term commitment.

In addition to continuing procurement of existing aircraft models, modernization efforts include the investigation of advanced derivatives of the F-16 and the F/A-18 aircraft to complement the new generation tactical aircraft currently under development - the Air Force's Advanced Tactical Fighter (ATF) and the Navy's Advanced Tactical Aircraft (ATA). Consistent with congressional direction, both the ATA and the ATF programs are being developed jointly and will be designed to include the unique requirements of each service.

The budget includes $4.5 billion to continue the demonstration and validation program essential to a feasibility decision on advanced strategic defense. However, as a result of recent congressional reductions in FY 1987 and FY 1988, the SDI program has to be restructured. The options for accommodating substantial budget cuts, based on the essential need to maintain a strong technology research program, were limited to reductions in integrated experiments and/or shifting from the balance between mature and advanced technology. Since its inception, a series of technology developments and experiments have underscored the potential for using advanced technology to construct an effective defense. Most recently, the ability to intercept targets within the atmosphere and space has been demonstrated. There have been significant advances in several directed energy and sensor technologies as well as in system architecture and operating concepts. Six major elements comprising a possible initial defense system were approved by the Defense Acquisition Board (DAB) for entry into the demonstration and validation phase. The purpose of this phase is to evaluate the feasibility of critical elements of a potential Strategic Defense System (SDS).

Military Construction/Family Housing

The budget requests $5.7 billion for military construction and $3.3 billion for family housing in FY 1989. This represents real growth of 2.5 percent over FY 1988 levels. The requested levels are considered the minimum necessary to support new weapon systems being deployed, to accomplish new or changed missions, and to provide adequate living and working conditions for servicemembers and their families. While essential mission and quality of life projects are funded, the backlog of facility requirements will continue to grow. The budget funds construction in support of major programs, such as the Advanced Technology Bomber, TRIDENT, TITAN, and PEACEKEEPER. It also provides funding for the Strategic Defense Initiative, the Navy's Strategic Homeporting Initiative, Fort Drum, New York, and Fort Wainwright, Alaska.

Family housing construction represents our commitment to improving the living conditions of military personnel and their families. The FY 1989 request funds construction of 3,226 new family housing units; improvements for over 16,900 existing units; and the leasing of more than 27,700 foreign housing units, 2,300 domestic units, and 7,100 Section 801 units under the build to lease program.

FY 1988 Funding Problem

I would also like to bring to your attention a serious FY 1988 operating issue. Sizeable FY 1988 O&M appropriation reductions, coupled with skyrocketing uncontrollable costs, have created problems in program execution that rob management of the flexibility needed to deal with program requirements or operations. Transfer authority is one of the most important management tools we have available to meet and respond to such changing situations. The FY 1988 transfer authority of $1.5 billion provided by Congress will be consumed rapidly by such requirements as implementation

FY 1988 UNFUNDED REQUIREMENTS
($ in Millions)

Overseas Station Allowance	500
CHAMPUS	645
INF Treaty Implementation	198
Foreign Currency Fluctuation	930
Industrial/Stock Fund Transfer Refunds	523
Civilian Pay Raise	416
Civilian Health Service	200
Fuel Price Increases	361
Persian Gulf Operations	175
GSA Stock Fund Surcharge	64
TOTAL	4,012

costs of the INF Treaty, increased CHAMPUS costs, absorption of added costs of the 1988 military and civilian pay raises, and higher fuel costs. I sincerely urge your support for our request to increase the Department's level of transfer authority to $4 billion in FY 1988 and $3 billion in FY 1989. Also, approval is essential of our proposed legislation allowing utilization of prior year balances to offset increased foreign currency fluctuations and higher overseas station allowances resulting from the decline in the value of the dollar. Disapproval of this requested authority is a defacto cut in readiness programs of almost $2 billion annually. I also encourage your strong support for defense readiness efforts -- including prompt approval for must-pay readiness-related reprogramings. In this period of constrained resources, we must forge a partnership to protect the most critical of our defense needs and provide our managers with the flexibility to do their job.

INF Verification

Our operating accounts are also under stress from emerging requirements resulting from the INF Treaty. Support costs for INF Treaty Implementation are estimated to be $198 million in FY 1988 and $148 million in FY 1989. These costs include personnel, travel and transportation, contract support and supplies and equipment for management personnel and inspection and escort teams at sites in the United States, basing countries, and the U.S.S.R. They also include costs associated with destruction and elimination of missiles, launchers and facilities, and other activities conducted in conjunction with the implementation program.

Management of Defense Resources

One of the highest priorities within the Department under this administration has been to refine and improve upon our management practices to ensure that defense resources are spent wisely and effectively. Secretary Carlucci has stated in very certain terms that he intends to continue these efforts and has structured an acquisition strategy based on three underlying principles of stability, quality, and partnership.

The cornerstone of this strategy is stability. Providing the Department of Defense with the degree of management authority and flexibility as well as timely authorization and appropriations so critical to efficient planning and program execution will require significant revisions to current attitudes and processes. These revisions can be realized through increased cooperation between the executive and legislative branches and between government and industry. First and foremost, we must achieve budget stability. It is impossible to plan and pursue a sensible acquisition strategy when resources remain an unknown variable until provided under continuing resolutions, often well into the fiscal year. We are pleased with the continued support within the Congress for the two-year budget concept. It will provide the stability necessary for successful pursuit of such money-proven practices as baselining and multiyear procurement, which can provide the incentive for industry to make the investment so crucial to our nation's industrial base.

We intend to introduce a total quality management strategy in the Department and to its contractors. Quality should be the responsibility of the entire acquisition team from design through production to deployment and should be the primary consideration from the very first day of a program's life. Studies have shown that 95 percent of the effort involved in producing a product is related to efforts other than the actual physical production of the product. We will focus on the inefficient and costly practices that occur within this 95 percent. Further, 40 to 50 percent of the life-cycle costs of weapon systems lies in logistics support. If we can ensure that the original product is of high quality, then we should be able to reduce these costs. We want to break from the traditional idea that quality means merely conforming to specifications.

Implementation of any strategy to improve quality in defense products and in management requires the cooperative participation of industry. In recent years, aggressive efforts to improve the acquisition process within the Department have strained its relationships with industry. While the relationships should be at arms length, they should not be adversarial. We intend to seek positive and cooperative ways for the Department and industry to work together to cut costs and inspire quality. We will work to eliminate the burden of multiple reviews by contract officers and auditors. This does not mean that we are abandoning our commitment to reduce waste and fraud. Rather, we want to free contractors to pursue efficiency and quality. And, we need to reduce and clarify acquisition regulations throughout the system. To this end, we are working with the Congress and the Office of Management and Budget to replace the maze of acquisition legislation with a single, understandable law.

Conclusion

Budget stability is the key to the efficient and effective allocation, management, performance, and affordability of our defense program. Stable funding by the Congress is a prerequisite to meeting our defense goals and objectives, especially during a time of constrained resources. The amended FY 1989 defense budget before the Congress represents the Administration's commitment to the defense topline agreed to at the budget summit. I urge the Congress support this agreement and ensure that we do not reverse the substantial achievements in our military forces realized over the last seven years.

The 2 percent growth projected for defense over the next few years, while conservative, may well be optimistic in the current fiscal climate. Nonetheless, it is critical that we use this opportunity arising from the budget summit to work together to provide realistic and stable funding levels for defense programs. We can successfully protect defense priorities within constrained resource levels only if those agreed upon levels are sustained and do not merely become another base from which further reductions are imposed, as has too often happened in the past.

Long-term stability cannot be achieved with only one budget, but must be part of a continuing shared responsibility between the Administration and the Congress. Next year we will maintain our commitment to budget stability by again presenting a two-year budget for defense. I ask the Congress to reaffirm its support for biennial budgeting. Only through two-year authorizations and appropriations can we begin to realize the stability so critical to rational and efficient planning and execution of defense programs.

DIFFICULTY IN ADJUSTING TO SUMMIT AGREEMENT

Chairman STENNIS. While you are referring here to the work that you gentlemen did about the summit agreement, you deserve a lot of credit. I think we all want to give credit where credit is due.

How much difficulty did you have in making that switch over? It was not an easy matter, I am sure, but you did accomplish it.

Mr. TAFT. Mr. Chairman, we had a great deal of difficulty in making that adjustment. It amounted to about a ten percent adjustment in fiscal year 1989. It was a larger adjustment in the future years of our program, because we anticipate lower budgets in the future than we had before.

But I would like to say, since you have raised the point, Mr. Chairman, that I am supported and the Secretary is supported in the Department by a superb staff in the budget and programming area. And I have never been more proud of them than I was this year.

In 8 weeks starting about Thanksgiving and right through the Christmas season and into January, we concluded an entire review of the whole budget. I think we have come up with a credible program. It has been well received on the Hill as not being at all other than what it purports to be. It is a genuine budget for the defense program, meeting those very difficult low numbers that the budget summit gave us.

And in 8 weeks, we did what normally takes us a great deal longer to do.

NATIONAL DEFENSE TOPLINE
(Current $ Billions)

	1988	1989	1990	1991	1992	1993
BUDGET AUTHORITY						
DoD	283.2	290.8	307.3	324.3	342.0	360.3
DoE & Other	8.2	8.7	9.1	9.4	9.6	9.9
TOTAL 050	291.4	299.5	316.4	333.7	351.6	370.2
OUTLAYS						
DoD	277.3	285.5	297.3	311.0	325.9	341.5
DoE & Other	8.1	8.5	8.9	9.2	9.5	9.8
TOTAL 050	285.4	294.0	306.2	320.2	335.4	351.3

So if I could have the first chart here——

Chairman STENNIS. Before you leave that, let me just make this comment. It established a precedent that something had to be done, something was done in that long summit conference, and then you followed up.

It is highly significant, the way you followed up on it. And the next step was our turn, more or less. I find your work is respected. That is a good solid comeback testimonial, anyway that improves the value of our institutions that we have and also the capacity of men and women that we select to carry them out.

So I am greatly encouraged by what has happened so far, and I believe it could be made to continue and will be continued.

All right, now you proceed.

Mr. TAFT. Thank you, Mr. Chairman. I fully associate myself with those remarks.

2-PERCENT REAL GROWTH FOR OUT-YEARS

The first chart describes not just the fiscal year 1989 budget, which conforms, as I say, to the summit agreement, but also shows the approximately 2 percent real growth path that we anticipate for the out-years. These are the planning figures that appear in the President's budget and that we are now undertaking to meet in the Department.

FY 1989 AMENDED DoD BUDGET

BUDGET AUTHORITY & OUTLAYS

(Current $ Billions)

	FY 1986	FY 1987	FY 1988	FY 1989
BUDGET AUTHORITY	281.4	279.5	283.2	290.8
% Real Growth	-4.2%	-3.3%	-2.9%	-0.7%
OUTLAYS	265.6	274.0	277.3	285.5

1989 BUDGET IN REAL TERMS

The next chart that I have shows where we have come from and puts that future program into perspective. It shows the 1989 budget in real terms. Thus the program is about .7 percent smaller than the program we had in 1988.

That is, I regret to say, the fourth year in which our real program has been smaller than the year before. If you consider these years as a whole, the total real reduction comes to about 10 percent, so that in fiscal year 1989 we are proposing, in order to conform to the budget summit, a program some 10 percent smaller than the program that we had in fiscal year 1985.

The first chart with its 2 percent real growth path suggests that if we follow that we will get back in fiscal year 1993 to a program the same size as the one that we had in 1985, before we started this reduction. So we will be getting back essentially to where we were.

BUDGET REDUCTION

I would emphasize that in reaching this size defense program we have had to eliminate a large number of programs that I would have preferred to fund. What we have done in generic terms is described on the next chart, which shows the $32.5 billion that we took out of the budget as it had been submitted a year ago and where the amount came from.

FY 1989 PROGRAM REDUCTIONS
($ in Billions)

MILITARY PAY	1.4
FORCE STRUCTURE	2.5
OTHER OPERATIONS	5.8
PROGRAM TERMINATIONS	4.8
PROGRAM DEFERRALS	2.8
DELAYED NEW STARTS	0.5
SHIPBUILDING	2.7
COMMUNICATIONS/ELECTRONICS	2.2
MISSILE PROGRAMS	2.4
OTHER PROCUREMENT/STOCK FUNDS	4.9
OTHER RDT&E	0.8
MIL CON/F.H.	1.7
TOTAL BUDGET AUTHORITY	32.5

As you can see, it came from a whole range of areas, but principally among these, I would note the program terminations, which account for nearly $5 billion of this reduction, and the force structure reductions for $2.5 billion, and then some delayed new starts.

These are a feature of the particular approach that we took to this exercise, which I will review in some more detail, because of the priorities that the Secretary of Defense has been describing to the Congress over the last months and that the administration has adopted.

This is the generalized description and I will get into it, as I say, in more detail, of what we have reduced. And that is the way in which our efforts are often described.

FORCES AND PROGRAMS PROTECTED

- Force Structure

Army	- 28 Divisions (18 Active, 10 Reserve)
Navy	- 600 Ship Goal (580 in FY 1989) - 15 Carrier Battle Group Goal - 15 Air Wings (13 Active, 2 Reserve)
Marine Corps	- 4 Divisions (3 Active, 1 Reserve) - 4 Air Wings (3 Active, 1 Reserve)
Air Force	- 36 Air Wings (24 Active, 12 Reserve)

- Strategic Programs
  - Peacekeeper/Rail Garrison
  - SSBN
  - Trident Submarine and Missile
  - E-6A Aircraft
- Strategic Defense Initiative
- Special Operations Forces

RETENTIONS IN BUDGET

The previous chart describes the reductions in the fiscal year 1985 defense program, which is of course the focus of a great deal of discussion in the Congress and the press. We like to think that some people also are asking what we are doing as well as what we are not doing. This chart describes in very summary form some of the things that we have retained in the budget to defend ourselves.

We think that, while, as I say, more could be done to reduce the risks that the country faces, the forces that we have retained, are significant: In the Army, 28 divisions; in the Navy, we are on our way to the 600 ship goal, although it is not going to be reached, as we had hoped, in 1989 we will have to wait for the next decade.

In the Marine Corps, as you see, we still have the four divisions, three active and one reserve; and in the Air Force, 36 tactical wings, which is about two fewer than we had had last year, but still a substantial force.

STRATEGIC PROGRAMS

We have preserved and protected our strategic programs. The Peacekeeper missile, the SSBN, Trident submarine and the D-5 missile are there. I think that it is a very important thing in the context of the arms reduction talks, to maintain a strong strategic program. Not just the offensive programs that are listed there, but also the Strategic Defense Initiative, for which we have programmed a significant increase over the budget that was appropriated last year, although it was not as high as we had requested in the original budget submission.

We also have, in putting together our budget, protected the program for Special Operations Forces, and I think that the priority that has been given to these forces by the Congress and the administration in recent years is well deserved.

Although we have taken ten percent out of the total program, the budget for the special operations type forces has actually risen slightly.

DEFENSE PRIORITIES

- QUALITY PERSONNEL
- READINESS
- EFFICIENT ACQUISITION

BUDGET PRIORITIES

The priorities that we have had in putting our budget together and in making the reductions are very clear. They are not different from what we have had in the past in this administration, and I think in fact they build on the strengths that we and the Congress have developed over the past 5 or 6 years in the armed forces compared with where we were in, say, 1979-1980.

The first and most important priority that we wanted to protect was the quality of our people in the military, the ones that we are able to recruit and the ones that we are able to retain.

We also have emphasized—and this relates to the people, the readiness of our forces, the training opportunities that we give them, the extent to which we can sustain them in battle. We have found that this goes together with quality personnel because the best people want to serve in a force that is ready and are reluctant to serve in a force that is not training them to do the jobs that they want to do.

Our third priority is the matter of efficient acquisition. We in the Department decided that we have to emphasize efficient buying, economic ordering quantities, for the systems that we were maintaining. We have terminated programs where we could not do that in order to fund at efficient rates those that we wanted to keep going.

I will get into more detail on each one of those in a moment.

FY 1989 AMENDED BUDGET
BUDGET AUTHORITY BY TITLE
(Current $ Billions)

	FY 1989 Request	FY 1989 Amendment	FY 1989 Revised	FY 1989 Real Growth
MILITARY PERSONNEL	81.6	-3.2	78.4	-0.2
OPERATION & MAINTENANCE	91.5	-5.9	85.6	2.4
PROCUREMENT	94.6	-14.5	80.0	-4.3
R D T & E	44.3	-6.2	38.2	0.3
MILITARY CONSTRUCTION - FAMILY HOUSING	10.7	-1.7	9.0	2.5
OTHER	0.6	-1.0	-0.4	-
TOTAL	323.3	-32.5	290.8	-0.7

BUDGET PRIORITIES

You can see in this second chart in crude form how the numbers come out in the budget and how they reflect our adherence to the priorities I have just indicated.

As shown at the bottom of the chart, the total program in 1989 will be 0.7 percent less in real terms than the program in 1988. The priority we have given to people is indicated by the 4.3 percent pay raise we have requested. The military personnel account is just barely down only because of force structure reductions, rather than the way in which we are actually treating the people that we have in our force. The priority that we place on readiness is indicated by the fact that the operations and maintenance [O&M] account is increased by 2.5 percent in real terms. To have a real increase in O&M of that size while we have an overall reduction in the budget shows the priority we attach to readiness.

To have an increase in O&M of that size while we have an overall reduction I think shows the priority that we attach to that.

The military construction and family housing increase likewise is for our people, to assure that they have the facilities and support that they should.

As you can see, we managed to meet the reduced number then principally by hitting the procurement account, which took the largest proportionate reduction. And the way that we did that, as I said before, is through the termination of programs as much as we could, rather than the stretching of them.

Chairman STENNIS. I just wanted to ask one question. Had you finished?

Mr. TAFT. Yes, sir.

PERCENTAGE CHANGE

Chairman STENNIS. Let us go over that total just a little bit more now. You have several columns there, and it winds up with that 0.7 at the end. Now, just sum up, what was that? Go through that again, if you will, in kind of a total form?

Mr. TAFT. This chart may be a little confusing, Mr. Chairman. I had to go over it myself a couple of times. The first two columns are the dollars that were in the original 1989 request and the dollars that we took out of it. The third column is simply the total of those, which is our revised request.

The fourth column is the percentage real change—a decrease, overall—for the revised 1989 budget as compared to the fiscal year 1988 budget. It is not labeled "percent" but should be.

The $290.8 billion revised 1989 budget is .7 percent below, in real terms the defense program we had in 1988.

Chairman STENNIS. So just tracking out into the dark, in the future, you think that the indication now is you would be able to sustain that savings, so-called, and maybe increase it some?

What is the prospect there?

Mr. TAFT. The savings that we have taken in the procurement accounts, in particular, are actually just a down payment on future savings that we anticipate.

Where we terminate a program, we usually make the least amount of money in the first year and much more in future years.

Chairman STENNIS. So, after all, this is part of a plan for a continuation at some level of these reductions?

Mr. TAFT. Yes, sir.

We took, as this chart shows, about $32 billion out of the budget for fiscal year 1989 we had actually submitted last year. Our plan for the future years will be reduced on the order of $40 billion each year.

I have a chart on this point. The saving rises so that the 1993 budget is about $50 billion lower than we had planned it to be.

Chairman STENNIS. All right.

PEOPLE PRIORITIES

- COMPENSATION --4.3% MILITARY PAY RAISE
- VARIABLE HOUSING ALLOWANCE INCREASE
- SELECTIVE REENLISTMENT BONUS
- SPECIAL & INCENTIVE PAYS
- CONTINUATION BONUS FOR AIR FORCE PILOTS

MILITARY PAY RAISE

Mr. TAFT. If I could just describe quickly, Mr. Chairman, the priorities for our people are reflected in our request for a military pay raise of 4.3 percent. This is, we feel, vitally important to attract and retain the quality of people that we have been doing and that we would like to continue to do. It is an important element of keeping faith with them, to keep their pay competitive with what is in the private sector, and we feel that a very important part of that, the most important part of that.

I know that it has been pointed out that this is a higher pay raise than is provided for our civilians or any Federal Government civilians. They are at 2 percent. And I would simply say that we feel that these two pay systems should be viewed separately, and that the military pay should be gauged to what the market requires. If we do not do that, we risk getting back into a situation such as we had in 1978, 1979 where the military pay system simply does not produce the right quality of people that we need to man our force, and we end up having to have raises of much higher than this to compensate, as we did in the early part of this decade.

INCREASE IN VARIABLE HOUSING ALLOWANCE

We have also proposed an increase in the variable housing allowance also which would simply maintain that allowance at the same rate as it now is, keep it up with inflation. We have some selective reenlistment bonuses to deal with particular areas where we have shortages, special and incentive pays, and the continuation bonus. These are all very important to deal with special areas where we need to retain people and are having difficulty doing it.

TRAINING PRIORITIES

- MEET ARMY GOAL OF 850 TANK MILES FOR GROUND OPTEMPO.
- MEET NAVY GOAL OF 50.5 STEAMING DAYS PER QUARTER FOR DEPLOYED FLEET.
- MEET AIR FORCE GOAL OF 19.3 TACTICAL HOURS PER MONTH.

TRAINING PRIORITIES

The next chart describes some of the training priorities that we have. I think that the points that are highlighted here are typical of our effort. With the budget that we have put before you we will meet the goal of having 850 tank miles for our ground Optempo. We will also meet the 15.8 flying hours per month for Army aviation. These are better than they were in 1987, and I think speak to our funding of those priorities for training our force that the Secretary and the administration are so committed to.

In the Navy we will maintain the steaming days which are the heart of training for the fleet.

And in the Air Force, we will maintain the flying hours at the 1987 level. This is exactly what we intended to do. We have a smaller force in 1989. There will be fewer total hours flown, but each pilot, as a result of there being fewer of them, will fly the same number of hours as he is flying today, and be as well trained and as well prepared to carry out the missions as he is today. That is what we have protected.

ACQUISITION PRIORITIES

- AIRCRAFT
  - 180 F-16
  - 72 AH-64
  - 72 UH-60
  - 72 F/A-18
  - 24 AV-8B
  - 12 F-14
  - 36 F-15
- MISSILES
  - 815 PATRIOT
  - 66 TRIDENT II
  - 510 TOMAHAWK
  - 12 PEACEKEEPER

ACQUISITION

The next priority that I would like to speak to is in acquisition where again, we have maintained, as I said, the production rates. These are some of the specific programs that we have protected. I believe it is fair to say that in every case, we have maintained the programs at an economic level of acquisitions. These are just a few examples; we went through them all and tried deliberately to fund at the efficient or at an efficient rate to buy the units at the cheapest price.

There are two exceptions I would note. One is the F–15, where the efficient rate is extremely large. We have been buying 42 F–15's a year. We are down to 36, which is not as high as we would like it, but it is just as high as we could afford in this budget level. The 12 Peacekeeper missiles that you see at the bottom of the chart. That is not an efficient rate for that missile, but it is the rate that the Congress has shown now 2 or 3 years in a row is the only one that it will fund.

I would hope that if the Congress resolves its concerns about the basing mode for this missile and adopts the rail garrison approach which the administration is recommending, that in future years we would purchase this missile at a more efficient rate. It would be very desirable to do that.

But that is an exception, so I note it, to the overall policy in which we have been maintaining our priorities for acquisition.

ACQUISITION PRIORITIES

- SHIPBUILDING
    - 1 TRIDENT
    - 2 SSN 688
    - 1 SSN-21
    - 3 DDG-51
    - 1 LHD-1
- LAND FORCES
    - 559 ABRAMS (M-1) TANKS
    - 581 BRADLEYS
- COMMUNICATIONS & ELECTRONIC EQUIPMENT UPGRADE

ECONOMIC PRODUCTION RATE

The next chart describes a few more of those systems where we have maintained, as I say, an economic production rate.

Chairman STENNIS. Excuse me. Let me interrupt you just a minute before you go in to that.

We have information here there may be a vote on the floor of the Senate in about 30 minutes.

I would like to recognize the Senator from Alaska, Senator Stevens, a very valuable member of this committee, and give him a chance to make such observations or ask such questions as he might wish. I am sure it would be welcomed by our valued witness.

Senator Stevens.

Senator STEVENS. Thank you very much, Mr. Chairman, and I am sorry, Secretary Taft, that time is a constraint here.

However, I have gone through your statement, and it is a bad habit of ours to leap ahead and see what is coming next.

It is nice to have you with us here again, Will, and I want to state for the record that I think you have had a very difficult job this year. I think we all ought to understand that the difference in the past, Secretary Weinberger and you had the budget presentation before us, and if Congress made a decision to reduce the budget, I think you wisely said OK, if you are going to cut it, you figure out where to cut it because we think it is a good budget.

This year, because of the budget compromise last year, which was a 2-year agreement, you and Secretary Carlucci had to take on the task of making the cuts yourselves, and this is really an amendment to the budget of last year since that was a 2-year budget, is it not, Will?

Mr. TAFT. That is right, that is exactly what it is.

Senator STEVENS. You are really asking Congress to change what we agreed to last year because of the impact of the late year budget compromise.

Mr. TAFT. Yes, and it is submitted in that form, I believe.

Senator STEVENS. I want to tell you that you have done a good job under very difficult circumstances, not that I would want to imply that I agree with you 100 percent. That is just not possible, I am certain, with the problems that you have.

SIXTH LIGHT INFANTRY DIVISION

However, I would like to get on the record so the Chairman would understand, the decision you made concerning a very vital part of the defense force that is in my State, the Sixth Infantry, Light Infantry Division. I congratulate you on the final decision that was made, and I am pleased that you are willing to work with us. I think it is symbolic of the lengths that you have gone to to make these reductions, and at the same time, to make sense with future force structure.

As I understand it, and you have spelled it out to some extent in your statement here, you have made some savings in fiscal year 1989 and 1990 by delaying the full implementation of the troops to be assigned at Fort Wainwright, and by eliminating one battalion from the troops that are stationed at Fort Richardson in my State. But, at the same time, we have put into motion the procedures that will bring about, we believe, the creation of a new battalion in the Alaska Guard, which will be a supplement to the Light Infantry Division, so that when we get into the period of the 1990s, hopefully, beginning in late 1990, actually fiscal year 1991, we should see the Light Infantry Division become the strength that we originally intended.

Now, is that your concept, Mr. Secretary?

Mr. TAFT. That would very much be my hope, Senator, and you certainly have described accurately what we have proposed for 1989 and 1990. I would hope that in the future years we would be able to realize the objective that we had of standing up that full division, and I think the idea of having the reserve battalion from the Alaska Guard is a very good one, and we are going to be working with that for the moment.

The division flag is there. The military construction for the headquarters, to keep that program as much on track as we can, is maintained, and I think it is an overdue investment in the military force that we have in that extremely important region.

FREEZING OF MILITARY END STRENGTHS

Senator STEVENS. Now, as I understand it, what you have really done is you have frozen military personnel end strength at the 1988 level. That eliminates the planned growth on the military side. We also will see an overall decrease in DOD work force of 10,000 from the 1988 level, so that there is going to be a reduction in the work force that we had anticipated even as late as last November and December, is that not correct?

Mr. TAFT. I believe it is 8,600 is the total number of active——

Senator STEVENS. Well, that is active, but it is my understanding that because of the projected increase we were looking at last year at our hearings, it is really 46,000 down from what we anticipated it would be at the time we were reviewing this bill.

Mr. TAFT. In the Alaska——

Senator STEVENS. No, I am not talking about Alaska now. I am talking about nationally. I have shifted gears to nationally.

Mr. TAFT. Nationally, we had in the Army a flat active end strength for military personnel. What we are now proposing is a reduction of 8,600 from that.

On the civilian side, there are associated reductions, and I do not know that I have the figures on those.

I am advised, Senator, that on the civilian side, for the Department as a whole, we have a reduction of some 33,000—split between the Army, Air Force and Navy—from what we were requesting a year ago.

Senator STEVENS. I think we have got to get from the point of where we are right now and what was funded and what was projected. There are three different items here, and maybe you could put it in the record for us so we are all talking about the same numbers in the future.

It is my understanding that we will actually end up this year, 1989, if we fund your request, at 10,000 less than we funded last year in the final version of the bill. Although that is substantially less than what you testified was to be needed in 1989 when we were looking at a 2-year budget at the hearings last year.

Mr. TAFT. Yes, sir, that is correct. We are asking for fewer, and I think 10,000 is about the right number for this year.

FURLOUGHS

Senator STEVENS. Well, I think that is important to get in perspective because we are all getting a lot of comments now. I am getting them from home, and I am getting a lot from people in the Senate, about the furloughs. I think we have to put the furloughs in perspective. They are the second step after having made substantial reductions in both uniformed personnel and civilians, in order to go even further and comply with this year's restrictions now. The furloughs are for the 1988 budget, right?

Mr. TAFT. That is right. The furloughs are essentially——

Senator STEVENS. Some people do not understand that, that those furloughs are for this year, and the reductions in force that we are talking about are for next year.

So there is a combined action here. Not only are you furloughing these people and hold the level that we have got now, it is going to be slightly less, really, in the future. There is a 2-year problem of complying with budget limitations. One is the 1988 restriction, which has led to the furloughs. The other is the 1989 actual reduction which comes about because of reduction in projected growth of the Department.

Am I right?

Mr. TAFT. It is both projected growth and some actual reduction of the numbers on board. But the fact is we expect to be able to do it in 1989 by attrition, because we have time between now and then for people to leave or not be hired so that there would not be a need so much for furloughs then.

In 1988 we were already, as you know, some 3 months into the fiscal year when we got the reductions, and the furloughs seemed to be a fairer way to do that; since you could not do it through attrition, your actual alternative would be to fire people.

Senator STEVENS. Well, I agree with that. I think it is very fair. I am getting a lot of comments from Alaska, but I think it is very fair, and I hope that the Congress realizes that the actions you are taking now in furloughing people are not related to 1989. They are related to the 1988 restrictions Congress imposed under the agreement we reached last year.

Mr. TAFT. They are a direct result, Senator, of the reductions in the O&M account that were made, and I have got a point that I want to get to eventually which will actually alleviate some of the problems in that O&M account, which are very important to us. This is our request for a transfer authority increase. But even with that, I am not sure we will be able to get rid of all of the problems.

But we have a very serious problem in 1988 in our O&M accounts.

Senator STEVENS. I have some questions about the portion of your statement concerning the Persian Gulf shortfall. But first, let me state that I want to thank you and the Department for cooperating with those of us in this committee that went over there to make an on-the-spot assessment of that operation. We did file our report, but you have been very cooperative with us as far as helping us make those arrangements, and we have another one coming up, Mr. Chairman, in terms of a visit to the Eastern European countries to see their reaction to the INF agreement and to see whether or not it is possible for us to anticipate a change in position by the Soviet satellites concerning conventional troop strengths.

I hope to do that along with the Armed Services Committee this year.

But I think that the Department has been most cooperative with us in terms of arranging these missions we have taken.

PERSIAN GULF OPERATIONS

I note that you project a $175 million shortfall in the Persian Gulf operations.

I wonder if that includes the $100 million that we already increased that account for 1988. Does it? Is that $175 million on top of the shortfall we already anticipated?

Mr. TAFT. Senator, the answer is that it did include the $100 million. We took account of that.

But there is some good news here. Our original estimate of the increment that those activities were costing us was $270 million. The $100 million went towards that and reduced it to $170 million.

We have recently reduced our presence in the Gulf somewhat. We have been able to do that because of Allied action, and also some of the costs have been assumed by our friends in the region. The result, therefore, is that our present estimate is $130 million instead of the $270 million. When we put the $100 million against that, we are looking just at a $30 million excess, and that will be covered within the O&M account.

Senator STEVENS. All right. I am not going to take much more time, Mr. Chairman.

Chairman STENNIS. It is all right.

FOREIGN CURRENCY FLUCTUATION ACCOUNT

Senator STEVENS. I am interested in the currency fluctuation that you report.

Could you give us for the record a breakdown of the $930 million-shortfall in the foreign currency fluctuation account?

I am interested in that particularly with regard to Japan. Our understanding from the Japanese is that they were going to increase their expenditures. I note that they still have not done that. We found that some of the moneys that they were listing as defense expenditures were the expenditures to build facilities that we rent from them for our military people.

Now, I do not consider those to be defense expenditures if they are an investment that we repay, I would like to get a further breakdown of what the Japanese consider to be defense expenditures that have been made. These people now are living over there on 1 percent of their GNP in defense expenditures when we are up to about 8, 7, are we not, 8 percent?

Mr. TAFT. I am afraid it is a little under 6, Senator; and it is a little higher than 1 for Japan.

[The information follows:]

FY 1988 FOREIGN CURRENCY FLUCTUATIONS SHORTFALL

The following table identifies the projected FY 1988 funding shortfall of $930 million on Operation and Maintenance financed overseas programs by Service and in total for Defense Agencies and by country. The estimate assumes the FY 1988 overseas operating programs will disburse at the foreign currency exchange rates experienced on February 16, 1988.

FY 1988 Foreign Currency Shortfall

	($ in Millions)
Service:	
Army	551.8
Navy	98.0
Marine Corps	33.7
Air Force	204.9
Defense Agencies	41.7
Total	930.1
Country:	
Belgium	+36.8
Canada	+10.4
Denmark	+12.6
France	+2.0
Federal Republic of Germany	+526.3
Greece	+.9
Italy	+23.1
Japan	+200.6
Netherlands	+13.2
Norway	+.2
Portugal	+1.0
South Korea	+37.9
Spain	+18.4
Turkey	−22.3
United Kingdom	+71.1
Total	+930.1

A "−" indicates a projected gain in the value of the U.S. dollar.

U.S. ABSORBING JAPANESE SHORTFALLS

Senator STEVENS. It was considerably higher—8 percent of our goods and services produced. I just saw a figure recently.

But it seems to me that they are doing what they can to bring on themselves a decade of bashing the Japanese. If they keep it up, they will not buy our gas. They end up buying gas, guess from whom? The Soviet Union. And they are not allowing our contractors to work on their big projects, but guess who is involved over there? Some Soviet companies and some companies from communist countries.

We do not quite understand how we should be absorbing these new shortfalls from the Japanese accounts to the extent that we are.

They made a big publicity thing over there when we were over there on how they had increased their host country compensation. When we looked into it, it really was not an increase. It was really an increased investment to attract more military people to Japan.

I would urge you to give us those figures.

Mr. TAFT. We will certainly provide them. The $930 million that you speak of in that account in part reflects the problem with the yen. It is also contributed to by the deutschemark and the pound and other currencies. But we will break it out.

Senator STEVENS. I would like to see identified, what is the scope of the problem. The problem with the other countries is a problem, but they are increasing their defense expenditures and they are increasing their host country support in meaningful ways.

In our recent trip over, that was my impression, that they were really trying to help us absorb those costs associated with our military activities in the NATO countries. I do not have the same feeling about Japan, and I would like to see if that can be documented from the figures you have available.

[The information follows:]

FY 1989 FOREIGN CURRENCY FLUCTUATIONS SHORTFALL

The projected funding shortfall changes daily given the volatility of the U.S. dollar especially during the past year. Last December the FY 1989 projected shortfall was $1,279 million. If the same foreign currency exchange rates used to calculate the FY 1988 shortfall of $930 million are applied to the FY 1989 overseas operating program, the projected funding shortfall is $950 million. If more recently experienced exchange rates are used, the funding shortfall for FY 1989 is projected to be $1,059 million.

FUNDING SHORTFALL FROM FOREIGN CURRENCY LOSSES

Senator STEVENS. Could you tell us the estimated funding shortfall from 1989 on these foreign currency losses? Do you have any estimate yet?

Mr. TAFT. In 1989?

Senator STEVENS. In this budget we are considering.

Mr. TAFT. Let me get that for you, Senator. We have tried to anticipate them, but of course they change each month. And ever since we put the budget together, there may be some adjustments. And I would like to just agree to work with the committee on the latest rate and the most likely rate for fiscal 1989.

These are estimates. You make them, we make them. And I think the important thing is that we work together and understand what assumptions are lying behind them, and to do the best we can for honest budgeting. We are never going to be right, but we ought to be prudent and do the best we can. And I will share that with you.

Senator STEVENS. Mr. O'Keefe reminds me that if the current exchange rates remain the same, the defense budget that is before us now has a shortfall of a billion dollars under our estimate. And that is serious, because everybody thinks we have got a level of budget based upon last year's agreement.

But if the shortfall is a billion dollars, then that has to be absorbed along with increased pay costs, and our modernization program is going to suffer by a billion dollars. I would like to see what that is.

And maybe we ought to start—I see my friend from New York. I think some of us are capable of convincing the Japanese they ought to do more if we really face up to it.

Senator D'AMATO. You better believe it.

Senator STEVENS. Could you tell me—one more provincial question, Mr. Chairman. I do get provincial, as you can see.

FISCAL 1989 ESTIMATED FUEL COSTS

What is your true cost estimate in this budget for 1989?

Mr. TAFT. I think we are carrying $28 a barrel for refined, which would come between $18 and $19 crude.

Senator STEVENS. You are assuming a rather level price for fuel to last through 1989, right?

Mr. TAFT. Yes, and I think that is a conservative estimate. As you know, we were a little low last year and we had to make it up. We were a little high the year before that, when the price fell very rapidly. But I would say that the $18-19 per barrel for crude looks good.

There may even be a little change there; that figure is based on today.

Senator STEVENS. It is conservative, Mr. Chairman, in the sense that the projections I have seen really reflect a lower price than that.

Mr. TAFT. That is what I am suggesting.

Senator STEVENS. So you may be able to make up some of your shortfall there.

Mr. TAFT. That is right.

Senator STEVENS. That is an interesting balance.

Chairman STENNIS. Would you yield to me here?

Senator STEVENS. Yes, sir.

FURLOUGH COSTS

Chairman STENNIS. What are your specific furlough plans for this year? What do you have worked out on that line? What is it going to cost? What is your estimate of the cost?

Mr. TAFT. The furloughs that we have planned, the only ones that I am aware of, are in the Air Force Logistics Command, and they are 10 days per employee. How they will be worked out in each individual component of that command is somewhat up to the commanders and the employees there. But those are the furlough plans that have been announced.

Chairman STENNIS. So you do not have information now for the number of days and the number of people that are going to be furloughed?

Mr. TAFT. No, we do not, Mr. Chairman. And in part, I would have to say what we have to do here is we have a very tight outlay target for 1988, which we are committed to meet and we are going to meet it, because that is the commitment we have made.

If we get the additional transfer authority that we are requesting of about $4 billion, that will ease the problems in the civilian pay area and in the O&M account generally. But it depends on our getting that authority and how things are going. We are going to be looking at this issue as we proceed week by week and month by month and, of course, towards the end day by day, because our outlays are in the range $20–22 billion a month.

And we have to manage those, and the only way we can manage them at the end in August and September is through our people. I hope that we will not have to make additional problems, but we are very conscious of that $285 billion target that you have given us and we are going to make it.

But it will call for management day to day in July, August, and September to make sure we do.

Chairman STENNIS. Well, those days will come when we will have to make a final figure, higher or lower. And we know we have your help. You have a problem there, and let us get at it the very best we can.

We will come back to that at some convenient time. You can try to give us amounts and also just what you are going to do, not just counting the heads, but how much will it involve, and so forth.

Mr. TAFT. We will work with you, Mr. Chairman. The details are on that chart.

Chairman STENNIS. We still have this uncertainty here about a vote coming up.

Senator D'Amato, we are glad you could find a way to get here. I am glad you are here. May I call on you now and have the privilege of interrupting you if necessary?

PREPARED STATEMENT

Senator D'AMATO. Certainly, Mr. Chairman. As a matter of fact, Mr. Chairman, I will ask permission that I may be permitted to submit my statement as if read in the record in its entirety, and I do have several questions that I ask that I be permitted to submit.

Chairman STENNIS. There is no objection to insertion into the record of your statement. You can proceed now with your questions you want to ask orally.

[The statement follows:]

PREPARED STATEMENT OF HON. ALFONSE D'AMATO

U.S. SENATOR FROM NEW YORK

Mr. Chairman, I welcome our first witness of the year, Deputy Secretary of Defense William Howard Taft.

According to the budget you have presented to Congress for fiscal year 1989, it will be a watershed year for our nation's defense posture. Over the next five years, an estimated $228 billion will have been cut from the requested defense budget, over $53 billion from just fiscal years 1988 and 1989. It is clear that budget concerns have shaped the defense numbers more than security concerns. If the defense numbers remain low in the out years, I expect that the fears of former Secretary of Navy, James Webb, will be realized.

The Soviet Union takes keen interest in our budget battles. Such broad cuts in defense spending have resulted in the elimination or slowing of important strategic programs. Meanwhile, the Soviet Union is not slowing its military buildup. The threat remains real and dangerous.

It is my sincere hope that Congress will refrain from the temptation of cutting the defense budget request even further. I would hope, Mr. Chairman, that if national security concerns require it, Congress will live up to its responsibilities and increase the defense budget.

The difficult choices are being made, Mr. Chairman. Unfortunately, it is tough to prioritize our national security. I do not envy your job, Secretary Taft. I hope you will work closely with Congress over the next few months to work out a defense budget that will preserve our national security without disproportionately impeding our efforts to reduce the deficit.

I look forward to working with you, Mr. Taft, as the budget process moves forward.

Thank you, Mr. Chairman.

DRUG INTERDICTION EFFORT

Senator D'AMATO. Thank you, Mr. Chairman.

Mr. Secretary, the Department of Defense has to my mind the opportunity and should be playing a critical role in our drug interdiction effort. And yet, in your remarks I have not found any attention given to the Department's participation in the anti-drug efforts.

Where does the Department of Defense support the war on drugs? How does it rank that in your order of priorities?

Mr. TAFT. Well, Senator, we approach it in two ways. One is our own drug problem in the military, for which we have direct responsibility, and that involves, of course, the investigation, prosecution, rehabilitation of people who work for us or are our servicemen.

That program has been extremely vigorously pursued within the Department and I think with effective results over the past 5 or 6 years.

A large budgetary commitment is also made by us—and I think that would be of most concern to you and the public—for the general role that we have in support of the other agencies, law enforcement agencies who are charged with preventing the entry of drugs into the country, which go of course into the general civilian side.

We work in support of the Customs and Coast Guard. We do maritime surveillance, we do aerial surveillance, we work with the DEA. We have been down in Bolivia. We have airplanes on training missions that are specially designed to not just train, but to train in areas where drugs may be coming in by airplane or by ship.

We participate in Operation HAT TRICK that you may be familiar with. Our Navy has a substantial commitment there. All of those activities are in support of other Federal agencies. They amount to a significant commitment, but they also enhance our own training at the same time. And that is the way that we do it.

FUNDING FOR WAR ON DRUGS IN FISCAL 1989

Senator D'AMATO. Let me ask you this, Mr. Secretary. We just got signaled for a vote, but can you tell this committee what level of resources you are planning to commit to the war on drugs in fiscal year 1989?

Chairman STENNIS. Excuse me just a minute, will you, please?

Senator D'AMATO. Certainly.

RECESS

Chairman STENNIS. This final passage vote is in progress now on the bill, 15 minute rollcall, and it is already upon us. I judge all of us are going.

We will have a suspension here. We will come right back, Mr. Secretary. You can catch your breath and rest a little bit and we will be right back. Thank you very much.

The committee will stand in recess until the call of the chair.

Mr. TAFT. If I may, Mr. Chairman, I have the figure for the equipment loan to the other agencies. It is some $300 million in 1987. This is for the Senator, in case he is not able to return.

Senator D'AMATO. Thank you, Mr. Secretary.

[Recess.]

CHART PRESENTATION

Chairman STENNIS. Mr. Secretary, you have given us some valuable information here today and also your opinion on matters. And the fact that the attendance is not overflowing is not controlling at all. We wanted to get in the record these opinions of yours and what you have done about it and that has been very good.

We want you to finish up now. You have your charts over there. You finish up in such a way as you see fit and proceed.

Mr. TAFT. Thank you, Mr. Chairman.

I really do not have much to say that we have not covered in response to the questions. We have been over the fiscal year 1988 unfunded requirements.

FY 1988 UNFUNDED REQUIREMENTS

($ in Millions)

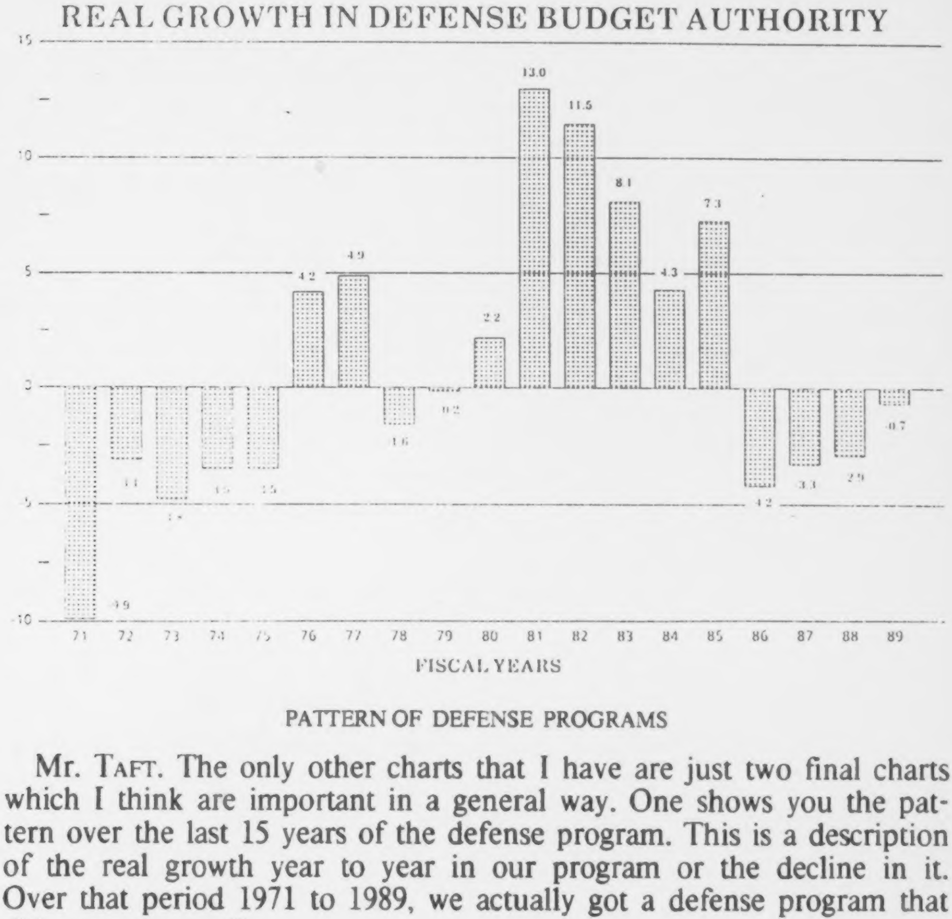
Overseas Station Allowance	500
CHAMPUS	645
INF Treaty Implementation	198
Foreign Currency Fluctuation	930
Industrial/Stock Fund Transfer Refunds	523
Civilian Pay Raise	416
Civilian Health Service	200
Fuel Price Increases	361
Persian Gulf Operations	175
GSA Stock Fund Surcharge	64
TOTAL	4,012

Mr. TAFT. I would just stress that they are a considerable number. I think most of them are familiar to this committee.

It is before this committee that our request for the transfer authority is pending, and we really do solicit your attention and support for that. These expenses that are listed here are not discretionary with the Department in any sense; we have to pay them.

The best way to pay them and the only way to pay them is through transfer authority from other funds that have been made available to us. I know that there is some concern on the part of the members that in agreeing to these transfers that we may be putting money from slower spending accounts into faster spending ones and thus have an impact on the outlays in this year.

I would simply say that in managing these funds we will assure that we meet the outlay target that has been agreed to in the summit and we will manage to that. So we do solicit your support for those.



PATTERN OF DEFENSE PROGRAMS

Mr. Taft. The only other charts that I have are just two final charts which I think are important in a general way. One shows you the pattern over the last 15 years of the defense program. This is a description of the real growth year to year in our program or the decline in it. Over that period 1971 to 1989, we actually got a defense program that did not grow at all.

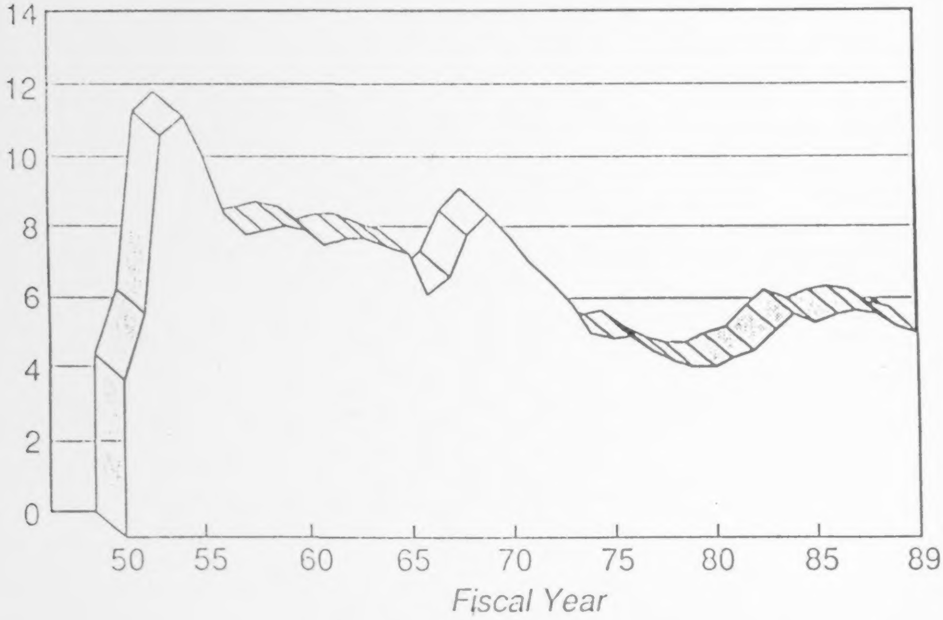
If you had taken the program in 1971 and just had it go out at the rate of inflation, it would actually have ended up about where we are proposing it to be in 1989. The problem is not only that that is not quite as big as I would have liked it to be, but that is a matter that is really beyond our competence in the Defense Department.

But a particular problem is the way in which we have gone about that. And as you can see, we have had the famine and the feast and the famine, and this makes it very difficult for us to manage programs.

Dave Packard has pointed out very eloquently in his report, and also on any other occasion when he has an opportunity, that if we could have some stability in the defense program, it would pay us back in savings far more than the immediate short term types of savings that we get by this choppy, erratic funding pattern that we have.

And so I would simply call this chart to the Committee's attention and urge that as we look forward and address this year's budget and the subsequent years' budgets, that we really try to set our funding on a stable footing.

I think that this budget that we have presented this year in fact is a good starting point for that. It seems to have a consensus on its funding level, and if we can put together and keep together a consensus for that and for going forward with modest growth in the defense budget, I think that we will pay ourselves back, not only by having a sound defense program, but by having it well managed as well.



DEFENSE OUTLAYS AS A SHARE OF THE GROSS NATIONAL PRODUCT

(Percentage of GNP)

NATIONAL SECURITY EXPENDITURES

Mr. Taft. The last chart that I have is simply an indication that in my judgment at the level that we are requesting today this budget is affordable, affordable for the country.

This chart shows the proportion of national security expenditures, defense budget, out of the total gross national product over about the last 40 years, back to 1950. What it says to me is that the total amount, the burden that we are placing on our people in this year at about 5.8 percent of GNP, is not an unreasonable one.

In the 1950's and 1960's, as this chart shows, our parents, who were living less well than we do today, managed to find eight, nine, always at least 7 percent of their product, to put into the defense of our freedom and security. And not only that, they actually paid for it at the time rather than borrowing.

And the result of that is what we enjoy today. It seems to me that we should, at the 6-percent level, be able to find at least that within ourselves to pass on the same thing to those who will follow us.

It is an affordable bill for the product we deliver. So that is the purpose of this chart.

And that concludes my presentation. Thank you, Mr. Chairman. It is always a privilege to appear before this committee.

And I guess I would like to say one more thing, and that is that it is personally for me a pleasure to appear before you. I know that this is your last year in service in the Senate, and the work that you have done in the time you have been here has been of enormous value to the country, to the Defense Department, and to our national security. And I would like to just salute that.

Thank you, Mr. Chairman.

Chairman STENNIS. Thank you, Mr. Secretary. Thank you for your personal words.

I know you have made a real contribution here, that your work will live and deserve to live.

600-SHIP NAVY

Let me direct your attention now to the situation about the 600-ship Navy. Just give us your opinion. Of course, you know it had been originally planned to have a so-called 600 ship Navy. I do not mean to be making any comment one way or the other about the gentleman who resigned, but I understand that that was a part of his reason, or at least to a degree was some of his thinking.

What about the long-range plans? Now, somebody has got to give some opinions about what you are going to do, your rethinking, replanning. You may have an explanation, what would cause the replanning. So let me ask you that general question, if you could cover it for the benefit of all.

Mr. TAFT. Yes, Mr. Chairman.

Well, I would say, first of all, that I and the Secretary and the administration have been the strongest supporters of building our Navy from the 480 ships that were in it in 1980 up to 600. That has been a very high priority with the Department. We have made enormous progress in that direction. We have gone from 480 ships in 1980 to 580 ships today. That is 100 more ships.

The numbers do not tell the whole story. These ships that we are buying, and have bought in this decade, are enormously more capable ships than the ones they are replacing in the force or the ones that they are joining in the force. They have not been small ships.

We have bought five aircraft carriers in the last 10 years. Those are the most expensive ships we buy. We have bought a Trident submarine every year, the second most expensive of the ships we buy.

This is a commitment, not just to the size of the Navy as measured by the number of its ships, but the quality of the Navy and the capability of the Navy.

I think that it has been a very useful thing for us to have the 600-ship Navy as our goal. I regret that we were not able to achieve it in fact in the 1989 budget as we had planned. But I do feel that the important thing to do in 1989 was to make sure that the ships that we have bought, that we are delivering to the force, these extremely modern and capable ships, are manned fully by trained, well-trained people of the highest quality that we have. We could not have, in my judgment, done that if we had not retired the 16 frigates that we did, and which essentially are the major part—not all of, but are the major part—of the difference between where we are and the 600-ship Navy that we wanted to be this year.

It takes some 4,500 people to man those 16 ships. I think that we need those 4,500 people to man other ships and support the Navy. It is very stretched in personnel at the moment, and that was the judgment that we made, that maintaining the force fully manned and capable was more desirable than insisting on the achievement of the goal in this year.

We are still working to achieve the goal in the next decade, and that can be done. But the main message I have for this committee, and it is not as if we have done it without you. You have done it, too, in this committee in funding those carriers last year, and the submarines that we have requested. But we have an enormously more capable Navy today than we had 10 years ago. Over the next 3 or 4 years we are going to be delivering all of the ships that we have been buying in the last 3 or 4 years.

I think that we can all be very proud of that and comfortable that we do have a Navy that is able to perform the functions that we wanted it to be able to perform when we set that 600 ship goal for ourselves.

Chairman STENNIS. Well, we may come back to that.

Senator Johnston, I am glad you could get here. I call on you now.

Senator JOHNSTON. Thank you, Mr. Chairman.

Secretary Taft, welcome to the committee.

FIVE-YEAR DEFENSE PLAN

As I look at the Five-Year Defense plan and the cuts that must be made from that, it looks to me as though fiscal year 1989 is the easiest of the years. Just to look at the cuts from the Five Year Defense plan, assuming a 2 percent real growth, it is $32 billion in 1989, $37 billion in 1990, $41 billion in 1991, $45 billion in 1992, and $50 billion in 1993.

Now, my question is have you in putting together this budget, have you assumed those kinds of cuts in the outyears, or are those decisions yet to be made and accommodated into the outyears?

Mr. TAFT. Well, Senator, the answer is both. We have put together the 1989 budget with an understanding of the constraints that we face in the future. It is that understanding that led us to propose the force structure reductions and the termination of programs that we did in the 1989 budget, many of which, as I am sure you are aware, do not repay us that much, particularly in outlays, in 1989, but which we have adopted and recommended to you to do immediately just for the purpose of easing our problem in 1990, 1991, 1992, and 1993.

I think that the steps that we are proposing to you in force structure and in program terminations are extremely important for that reason. But the second part of your question is: Have we in fact done it all and made all of the decisions that are necessary to achieve those reductions? The answer is that we have not at this time. We do have a program review which is scheduled for this summer. What we did was done in the course of about 8 weeks, and I think it would have been unwise to attempt in that short period to make all of the program decisions that are involved in revising the 5-year plan.

We are aware of them. I have been in this business now for 7 years, and 4 years running the budget. I think I have a fair idea of how to get where we need to be and what those numbers imply, and perhaps how I would do it at this time. But I think to have finally decided those things as they appear to me now would have been a mistake. I want to hear from the services, I want to hear from our Commanders-in-Chief of the Unified and Specified Commands and have a bit of a discussion in the course of the summer before we finally shape it.

But I think we can make it, and we will make it with the advice and participation of our people.

VALIDITY OF 600-SHIP NAVY

Senator JOHNSTON. Well, let me say I very much approve of what you have done thus far. You are making choices, realistic choices, and I think that is what we have failed to do as a nation these past years, putting too many things in line for funding than could possibly have been funded, and now we are making choices. Not everyone agrees that you should not have a 600-ship Navy, as the little brouhaha we had with Secretary Webb in the past few weeks indicates.

I happen to agree, by the way, that the decision was obviously correct. The 600-ship Navy that is achieved only by having part time frigates out there which are not particularly capable I think is putting form over substance, and I very much approve of that.

But I think you are making some tough choices here, and I am glad to hear that they are at least fitting within the notional direction of where we should be going. Obviously not every final decision can be made, but it is at least calculated to fit within, do I understand, about a 2-percent real? Is that sort of the glide path you are looking at?

Mr. TAFT. That is what those numbers that you referred to represent, and which seems to us to be reasonable. It is a declining share of GNP, at least as it is projected.

Senator JOHNSTON. My guess is that 2-percent real is probably the upside as well as you can do. I mean, given a constant Soviet threat, I would think a 2-percent real would be at least desirable, and if Gorbachev and his new rhetoric is matched by real pullbacks in Eastern Europe, then I would think it would be very difficult to achieve the 2-percent real, in which event we will all have to go back to the drawing boards, and I hope we would not overreact in that situation, but at least I hope that Gorbachev will match his rhetoric.

Mr. TAFT. Senator, I would like to have really more than 2 percent real growth, but that, I think, we are bowing to the situation as we find it, the economic situation, the political situation, and we are running some risks that I would prefer not to run, options unexplored in R&D, and we are getting pretty close on being able to retain the quality of people and recruit them that I would like to see in the force. Some of our readiness is not as good as I would like it to be. But I think 2 percent is where we should be, and we will be making the case for that, or I will be, wherever I am, as strongly as I can. And we can well use it, and I really think we can afford it.

SUPPLEMENTAL

Senator JOHNSTON. Now, I understand, Mr. Secretary, that you will submit a supplemental which will, or proposal in a supplemental to increase transfer authority from $1.5 billion to $4 billion, and allow the use of expiring balances to offset increased foreign currency fluctuations, and raising overseas station allowances.

Now, what would be the impact—first, I want to know if that is correct, and what would be the impact if we did not allow these changes?

Mr. TAFT. Yes, sir, the answer is correct, we will be submitting them. The impact if you did not allow these changes would be that we would not have the authority to transfer funds in sufficient quantities from outside of the O&M and pay accounts to fund what is statutorily required now so the only way we would be able to deal with it would be that the number of people that we have in those accounts would have to be diminished. For example, to fund the civilian pay raise, we will need to transfer funds from the procurement account to O&M. What we are asking for is the authority to do that.

If we in fact have to find the money to pay the rates of pay that have been designated to our civilians within the money that is now in the O&M account, we would have to reduce the number of civilians there. Likewise, the CHAMPUS account, and the military pay for the overseas station allowances in the MilPers account. You are stuck inside those accounts, and in those accounts, the only way that you can find money to pay the rates that have been statutorily approved is to reduce the populations of the people receiving them.

That would be, in my judgment, disastrous.

AEGIS CRUISER

Senator JOHNSTON. One final question, Secretary Taft.

The Japanese want to get into the Aegis cruiser business. I view that with great alarm and consternation.

Would you state your position on it and justification for that?

Mr. TAFT. Well, Senator, I view the Japanese desire to get into the Aegis cruiser, or Aegis destroyer system, as something that we need to be very forthcoming on and encourage. I think we had a discussion earlier this morning with Senator Stevens about the Japanese and their participation in the world community's defense. They want to do this. It is an extremely valuable system for them in precisely the area that we want them to focus on, which is the defense of their homeland and the defense of the sea lanes of communication out to 1000 miles from Japan.

The Aegis system is ideal for that. That is what we need it for. That is what they could use it for.

It is obviously a very sensitive technology. It needs to be protected when we share it with them, and we need to make sure of that. But it is something they want to buy from us. It is something they need to do their job.

Senator JOHNSTON. They want to manufacture——

Mr. TAFT. They want to buy the technology for making it and pay for that, and it seems to me that we are depending on them, we want them to do this job extremely well in Japan, and we ought to be forthcoming and make available to them the things they need.

One of the problems we have with our allies is getting them to spend money on defense. But even if we are to get them to spend money on defense, it would be tragic if they spent it, say, more money, in duplicating things that we have already done in this country. As an Alliance——

Senator JOHNSTON. Well, why would they have to have the capacity to build ships which we are already building? It seems to me just the opposite, that they are duplicating our own capability. We can build——

Mr. TAFT. Well, we would share the technology with them, and they would build it, but it would not be expensive for them to develop it. They would be spared those costs, and the Alliance would benefit because that additional expenditure would not be made.

We have tragically, again and again, in our Alliance, developed too many airplanes, too many radars, too many tanks of different types, spent duplicating R&D expenditures.

Senator JOHNSTON. I agree with you.

Mr. TAFT. The result is not that they just buy it from us. That is not what happens when we refuse to make these things available to them. What happens is they go off and develop it themselves at vast expense. We will never get there, no matter how much they spend, if we do not do this more efficiently as an Alliance.

Senator JOHNSTON. Now, the Japanese are not talking about building their own DDG-51s or substitute therefor, are they?

Mr. TAFT. I believe what they want is the Aegis technology——

Senator JOHNSTON. I know they do, and it seems to me that that——

Mr. TAFT. —to put it in their defense systems.

Senator JOHNSTON. I mean, here they are with just a fraction of what we are spending on defending their interests. I mean, I think you can make a very strong case that the Japanese ought to be the ones to defend their own sea lanes, anyway.

Mr. TAFT. And they want to do that.

Senator JOHNSTON. And here we are projecting American power, some say, beyond our capabilities, and now they are saying just to do the fraction of what we are doing, they have to be able to get—we have to export American jobs over there in order to do it, and I just think it is an outrageous request, and I would certainly hope we would resist it in the strongest way.

Mr. TAFT. Well, we do not share that view, Senator, for the reasons that I gave you.

Senator JOHNSTON. I know that. I hope to convince you that we are correct.

Thank you, Mr. Chairman.

Chairman STENNIS. Thank you, Senator.

Senator Stevens, we are glad you are here.

Senator STEVENS. Mr. Chairman, I want to ask on the record that Senator McClure's questions be responded to. We also have some questions just been given me from Senator DeConcini that he would like to submit, Mr. Chairman.

OPENING STATEMENT

I would like to have my opening statement, that I sort of paraphrased, put in the record after your comments, if I may, at the beginning of the hearing, I also have a series of technical questions concerning certain items in the budget.

[The statement follows:]

OPENING STATEMENT OF HON. TED STEVENS

U.S. SENATOR FROM ALASKA

Our Chairman has called this year's first meeting of the subcommittee this morning to hear testimony from Deputy Secretary Will Taft on the fiscal year 1989 defense appropriations request.

At the risk of understatement, this year's budget request represents the most difficult series of trade-offs and options presented to Congress during the years of this administration. The requested $299.4 billion for national defense function 050 represents a real decline of slightly less than 1 percent from the current rate. In developing this request, the Defense Department has fully complied with the targets established on November 20 last year by the administration and Congress in order to meet deficit reduction targets. Relative to the Department's request last year in the 2-year budget submission, this amended request is better than 10 percent below the levels envisioned just a year ago.

While this budget does clearly signal the administration's priority to control the deficit, it is not without considerable risk. Strict adherence to the budget summit agreement could signal the beginning of contracting defense budgets in the future. As we move through consideration of this bill through the balance of the year we will undoubtedly encounter differences of opinion as to how we should best accomplish this task without damaging the substantive gains in national defense previously achieved.

As a general proposition, the Department's efforts to recognize these fiscal realities represent a very strong start. Our challenge is now to learn to live within limited means—and $300 billion is not insignificant means.

Mr. Secretary, welcome back. I look forward to your testimony.

SUPPLEMENTAL POSSIBILITY

Let me close, if I may, with a question about the supplemental.

I believe we are going to face a supplemental this year, is that right?

Mr. TAFT. I am not sure, Senator. I do not think we have in mind a supplemental. We have a request for transfer authority before you.

Senator STEVENS. Well, is that where you want to increase the reprogramming authority from $1.5 billion to $4 billion?

Mr. TAFT. That is correct.

Senator STEVENS. That is primarily to deal with the question of the shortfall in funds for personnel?

Mr. TAFT. Well, we have the list of them, in fact. They are not all personnel. Some others are fuel price increases, the Persian Gulf operations, foreign currency, and the INF treaty implementation. But the bulk of cost is in personnel, CHAMPUS, overseas station allowance, and civilian pay raise.

Senator STEVENS. You have got fuel price increases, but I thought we had a discussion indicating you are already conservative for fuel prices.

I do not quite understand that.

Mr. TAFT. That was our 1989 number I was talking about at that time.

Senator STEVENS. I see.

In terms of—do we have a list of where you are going to take that from?

Mr. TAFT. We will work with you to make sure that you know the source of the funds. I believe it is in the procurement accounts, and it is expiring or previous year balances.

Senator STEVENS. I would like to see those, see what we are going to do about them because it does seem to me that, again, I want to compliment you for this budget. I think it is a real budget, that we do not have much punching room on. I think we may have a disagreement over those activities in terms of—it is my understanding you are coming to us with a request to increase the transfer authority on a permanent basis from $1.5 billion to $4 billion, is that right?

Mr. TAFT. I do not know whether it was permanent or not, Senator. I would like it to be permanent. I will tell you that it is not a complete license in that when we use the transfer authority, as you know, we still have to come up and get permission for the specific reprogrammings that we do.

This is the statutory limit on our and the committee's discretion to use that reprogramming authority.

But we still work with the committee within that statutory limit.

Senator STEVENS. Well, I will look forward to the information provided the Chairman on that.

BASE CLOSINGS

I said I had only one comment, but on one other subject, the subject of the commission that the Secretary speaks on concerning base closings. There was a report in this morning's paper about my comments concerning that. I am constrained to put it on the record.

That is a report—that the commission would produce a report that would actually be acted on by the next Administration, as I understand it. There are some of us who believe that you have got enough on your plate right now and we ought to look at the stationing of troops abroad and what we are going to do about some of the costs.

I am not talking necessarily about withdrawing troops as much as the costs, where the money is going to come from for these increased costs of those deployments in Korea, in Japan, in the NATO countries.

And I think to address the base closure issue before we address the problems of the costs of overseas deployment might get us into a worse battle than we realize. I would hope the Department will recognize the time factors of the commission.

We will not have a post-election session this year. There will be no way for Congress to review this year the activities of a commission that might be created by this bill or by the authorization bill this year. I have not discussed it with my good friend the Chairman, but I do feel that you and the Secretary ought to go slow in that new direction, not because I fear base closings. They have closed half the bases in my State—you have not, but the DOD has—since I got here.

It is not a question of base closures in any particular State. It is a question of how many issues you can tackle at once. And I think you are going to jeopardize the support this defense budget has if you act prematurely in this area. I just issue a warning in that regard.

Let me join you in your comments about my good friend from Mississippi. He has taught so many of us not only respect for what we are supposed to be doing here, but for what he has done here. And I think it is nice that you remembered that, Will.

Thank you, Mr. Chairman.

Chairman STENNIS. Thank you, Senator. We do not want that analyzed too closely.

Your request for inclusions in the record as you made it will be sustained.

Senator STEVENS. Thank you, Mr. Chairman.

Chairman STENNIS. Senator Sasser, I am very glad to see you here and I recognize you.

Senator SASSER. Thank you, Mr. Chairman.

I really very seldom differ with the Chairman, in fact hardly ever. But I must differ with you when you say that the statements that Secretary Taft was kind enough to make about you this morning would not bear close analysis. I think they would stand the most rigid analysis. I would like to associate myself with the Secretary's remarks regarding our distinguished Chairman that I have had the honor to serve with for 12 years here in the Senate, on the Appropriations Committee, and I certainly learned a lot from him.

Chairman STENNIS. Thank you, Senator. Thank you. I learn from you every day.

Senator SASSER. I just want to make a statement first. I want to echo what I suspect other of my colleagues have said in here this morning and say that I think you and your colleagues at the Department of Defense have done a good job of putting this budget together this year.

I think for the first time in a number of years, some of the hard choices have been made over in the Department on this budget. And I believe that you have given the Congress a budget that we can start to work with and one that is meaningful and will be very helpful when we arrive at our final evaluation as to what is to be done. And I want to commend you for that.

CUTTING OF AIR GUARD AIRCRAFT WINGS

I want to also sound a notable alarm, if I may, and that is the cutting of some of the Air Guard aircraft wings and some of the other force structure reductions that have been made in the Guard and in the Reserve. I do believe that the funds that we spend on the guard and on Reserve forces are well spent.

It is my view that that is some of the most cost efficient money that DOD spends. And as we move into an era of trying to reduce expenditures, I hope that reductions with regard to the guard and the Reserve would be kept at an absolute minimum, because when you are trying to save money sometimes I think putting more money there is one way of saving it.

Mr. Secretary, there is strong support in the Congress among some of our colleagues for initiating conventional arms reduction talks with the Soviets as soon as possible, for a number of reasons, not the least of which is some concern about the large conventional imbalance and the movement towards less reliance on the nuclear deterrent in Europe, that we need to get down to some hard talking with the Soviets to see if there can be some meaningful reduction in conventional forces in Europe.

And I am not talking about a one for one reduction. That is clearly not going to be in our interest, because if we go one for one we would end up with no forces and they would still have a substantial conventional force there.

CONVENTIONAL FORCE REDUCTION IN NATO

What is the Administration's position on negotiations for conventional force reduction? When do we seek to get them started? What do we hope to accomplish? Can you illuminate that whole area for us this morning?

Mr. TAFT. Yes, sir, I would be delighted to.

Let me first just associate myself with the comments you made about the guard. We fully share your view that both the Air Guard and the Army Reserve and Guard are a very cost effective way of strengthening our forces, and we have tried to protect them as much as we could in this budget.

It is a very difficult budget. We have had to take some reductions from what we would have liked in them. But it is not something we did with any enthusiasm, and I hope you will see when you look at the budget that we have indeed given a priority to those forces.

On the talks or the prospects for conventional arms reductions, we share certainly your assessment that this is where the major effort in defense is placed. If we are going to have the reductions in nuclear forces that we have some prospect of, then maintaining a balance in the conventional side becomes even more important to us.

These talks will be extremely difficult because, unlike the INF talks or the strategic talks, they involve not just two parties, but the 15 or 16 NATO nations and the six Warsaw Pact countries, although they seem to get along a little more cohesively on these subjects than we sometimes do.

But we certainly are approaching this subject, discussing with our allies the way to bring about reductions in the Pact's forces so that there will be a more balanced situation for conventional forces in Europe.

At the moment, there is the need to identify, first of all, the base, what is there and what would be a proper reduction both on their side and on ours to maintain or even create a balance.

We are approaching these talks. We would expect them to get under way in the course of this year. We have been preparing for them, but it will be a long negotiation and I would not anticipate in connection with, let us say, the budget, sir, that is before you for fiscal 1989, or even perhaps in the year or two to follow, that there would be significant impact from those talks.

Indeed, a little bit the reverse would be my guess, that we need to keep these budgets in mind because they will have an impact on those talks, in that if we do not keep up conventional forces on our side we certainly will not get the reductions in the Pact forces that we look for.

CONVENTIONAL FORCE REDUCTIONS

Senator SASSER. Mr. Secretary, as we move in the direction of talks or negotiations with the Soviets with regard to conventional force reductions, I would hope that prior to entering into those negotiations that we would have an agreement with our NATO allies that, in the event we are successful in negotiating a conventional force reduction that is in the interest of the alliance, that the first drawdowns or the lion's share of the drawdowns with regard to troops and commitments, troops and equipment in Europe, would be United States forces, United States troops commitment, an agreement with the NATO allies that if there is going to be a reduction in conventional forces that the United States should get a disproportionate share of that reduction in forces in Europe, using that as a means of requiring that our allies accept a larger commitment on the part of Western Europeans for the defense of Europe.

Will the administration seek to get such an agreement from our allies with regard to conventional force reductions, that we get the lion's share of the reductions?

Mr. TAFT. Well, Senator, I would be getting a little beyond where I am knowledgeable on our negotiations with the allies about this. I would make this point, though—and I just want to be sure we understand each other—we have troops that are dedicated to NATO that are in Europe, and we also have troops that would be sent to NATO that are in the United States. It is not clear to me as to whether you are saying that, if we get reductions, that we should take the ones that are in Europe dedicated to NATO, rather than the ones that are in the United States.

Senator SASSER. It would be my thought, Mr. Secretary, I would prefer to take the ones in Europe, because my guess is it is more costly to maintain our forces abroad than it would be to maintain them here in the continental United States.

Mr. TAFT. Well, I would not necessarily agree with that. And I guess the major concern I would have is that it is important—and that is to put it mildly—to the effective defense and cohesion of NATO that American troops be in Europe.

That is a linchpin to our entire defense strategy.

Senator SASSER. I am not disagreeing with that.

Mr. TAFT. And if we could get the reductions, our reductions, we would need to look at how we would take them. I do not think that at some point there is desirability in just reducing troops in Europe to the exclusion of looking in the United States.

The savings would come either way. The key thing is not to undo that connection that we have, that our troops in Europe do represent. There is just no question that that is vital glue to the alliance, and I would not like to see us focusing on those troops if we could get the same money somewhere else.

U.S. CONTRIBUTION TO DEFENSE OF FREE WORLD

Senator SASSER. My point is this, Mr. Secretary. I think that we may not be able to get any meaningful conventional arms reduction talks going. But in the event we are successful—it may be an unlikely event, but in the event we are successful in negotiating some satisfactory conventional force reductions in Europe with the Soviets, that we in the United States get a substantial portion or disproportionate share of the force reductions.

And I say that for this reason. Here we are almost a half a century after the Second World War, with the United States maintaining a force of 300,000 military personnel in Europe, 330,000 civilian employees and dependents. Any way you slice it, I think we are contributing substantially more, either per capita or as a percentage of GNP, to the common defense of the free world.

And we are in a situation where the gross national product of Western Europe now exceeds substantially that of the Soviet Union. The population of Western Europe exceeds that of the Soviet Union. And they simply are going to have to do more in my view in the common defense of Western Europe.

Now, I do not say that to beat NATO over the head or try to diminish the importance of that alliance. It is very important to us, and we do not have the money in the Treasury to replace that alliance if we lost it.

But what I am saying is that U.S. public opinion is demanding that our NATO allies do more, and I do not see that public opinion changing in the near term. And the Europeans themselves, in just a casual reading of European press, are aware that they must do more. It is starting to pop up here and there.

And this is an opportunity now for us, I think, if there is a reduction in conventional forces. They can keep their conventional commitment either level or reduce it to some point and we may be able to reduce our conventional commitment as far as Europe is concerned fairly substantially.

I just do not want us to miss this opportunity.

Mr. TAFT. I think I share the view fully that we should certainly be at the head of the line if reductions are coming. We were at the head of the line in the INF negotiations. We in fact insisted, and successfully so, that the British and the French nuclear systems not be part of that, and they are being maintained. Ours are coming out and the Soviets' are coming out.

So it can happen, and I do not have any difference with you there. I also do not have any difference with you on the point of having our European allies do more than they are doing in defense.

They should. We tell them that frequently. I think they sense it, some of them. Some of them do not, and we need to work on them harder. And that is important, not just because they need defense but, as you say, Senator, to preserve the consensus in this country for NATO and what that means to us.

I do not myself, as I am sure you do not, regret the contribution that our troops in Europe have made to preserving peace on that continent over the last 40 years. It has served us well.

Senator SASSER. Thank you, Mr. Secretary.

Thank you, Mr. Chairman.

Chairman STENNIS. Thank you, Senator. I am so glad you could come.

AEGIS SHIP

Mr. Secretary, I will not be long on this. I do not know a great deal about ships, but I know the Aegis ship is one of the better achievements, as I understand it. Of course, in fact if some of them were made in Mississippi that would have some influence on me.

But these admirals tell me that it is really a great ship. I notice you went through it this time that we could have had five under the authorization. You reduced that to three.

And I am not just trying to make a fuss about that at all, but were there any technical reasons or anything the matter with it that caused you to make this production level lower? Or was it just caused from lack of money?

Mr. TAFT. Mr. Chairman, there was no technical reason at all. It is a fine ship. We know how to build them. They work extremely well, and that is why we are buying three of them.

We would like to buy at least four. The good news is that in 1988 we bought more than we had asked for of the Aegis cruisers. I believe we bought five last year. The administration had only asked for three.

The other two that Aegis are missing from the fiscal year 1989 budget are due to an affordability issue.

Chairman STENNIS. Is what?

Mr. TAFT. An affordability issue—we could not afford them. It is exactly as you said. We need them. They are among the things that did not get bought because we do not have as much money as we need.

Chairman STENNIS. Well, I am not going to try to make an assault on you for that. But if you had the money, perhaps you would go on and add to what you already have?

Mr. TAFT. Yes, sir. It is about $700 million, Mr. Chairman. I looked at it up to the very last moment, and in the end could not fund it.

We had a choice, really, between a fourth Aegis ship that and an SSN-688, which is about the same price tag. And after consulting with the chairman of the JCS and the CNO and the Secretary of the Navy, I concluded the better decision was to buy the extra SSN rather than the DDG. We certainly could have used both.

Chairman STENNIS. As I understand it, there is nothing wrong with it. It is just the condition you were looking at. If you had more money, you would look at it again?

Mr. TAFT. We would not look at it for long, we would just buy it.

Chairman STENNIS. By the way, here are the questions requested to be put in the record by Senator Robert Byrd of West Virginia. Without objection, these two are admitted for the record.

Do you have anything further, Mr. Secretary, that you want to say?

Mr. TAFT. No, I have nothing further, except to thank you, Mr. Chairman, for the opportunity to appear before you. And we will work with this Committee as it goes through the difficult process of fashioning the bill.

Chairman STENNIS. Well, I am certainly glad you are in it. I know you are making some moves in some good directions and some great purposes that you have.

OVERCHARGES ON STEALTH BOMBER PROGRAM

Now, here is one matter that belongs here. The military is always or too often being accused of something in the papers, of violating the law and all, when really those are not the facts. Here lately there have been allegations of some kind—I did not see these, but they are in the record—by former employees of Northrup Corp. that the Government was overcharged by more than $2 billion on the Stealth bomber program.

Now, I just cannot conceive of that being true. It is thrown out before the people and they come to us, as you know, and are concerned. I would like to see you move fast and effectively on these matters.

Your comment on that, if you have had a chance to look into this charge.

Mr. TAFT. Well, Mr. Chairman, what you say is correct. There have been allegations along these lines. They are being investigated, and that investigation is ongoing. I cannot comment on the progress of it while it is still incomplete.

But I can assure you that this and all such allegations are investigated extremely thoroughly. We have no money in our defense budget that we can afford to waste, and so we pursue these and prosecute them if that is warranted. And that will be the case here.

This investigation will be very expeditiously and thoroughly pursued.

Chairman STENNIS. Well, I am pleased you have that attitude. That is the course I hope you will follow.

Senator, I will call on you in just a minute here.

I may have to leave, so I will tell you again, you are making a real contribution in this position. This testimony, what you have done already and what you plan to do proves the case. I know we are indebted to you for what you are doing, and the country is, too. Thank you again very much.

Mr. TAFT. Thank you, Mr. Chairman.

Chairman STENNIS. I am glad you got here. We can get to you now.

Senator KASTEN. Mr. Chairman, I have been upstairs in the Budget Committee. I guess a number of us have been shuttling back and forth.

MINESWEEPER ISSUE IN WISCONSIN

I wanted to welcome Will and just say, and we do not need to go through the details now, but we have got a very serious problem in Wisconsin on the minesweeper issue. And I know that some in your Department are familiar with what we have been working through. But I want to work with you to try to solve the disputes and the negotiations that are going on right now with Marinette Marine on those minesweepers.

We have got a time problem that looks as if we will probably not have a new Secretary of the Navy by the time the issue must be resolved. They have got a deadline of about March 15, at which time they are going to lose their lines of credit with the banks.

So I am anxious to work with you on that. And I have a couple of other questions I will submit for the record. But I basically just wanted to come here to welcome you and thank you for the work that you are doing.

Mr. TAFT. Senator, we will be glad to work with you on that, and I thank you for your welcome. I am sure you got the same answers in the Budget Committee that you would have gotten here.

Senator KASTEN. I hope they were the same.

Mr. TAFT. I assure you they are.

Senator KASTEN. I will go back and compare.

Chairman STENNIS. Well, I am glad you got here. Come again.

All right, I believe that concludes the roster for this sitting.

Mr. TAFT. Thank you, Mr. Chairman.

Chairman STENNIS. We are going to be consulting with you some more, I expect. Thank you again very, very much.

SUBMITTED QUESTIONS

The submitted questions and answers will be inserted in the record at this point.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

QUESTIONS SUBMITTED BY SENATOR STENNIS

Senator Stennis: Mr. Secretary, in your budget, you propose to reduce Army helicopters by 620 in 1988 and 1989, stand down the fourteenth Navy carrier airwing in 1989, deactivate two Air Force tactical fighter airwings, and reduce Air Force Guard and Reserve Squadrons from 24 to 18 aircraft.

Has aircraft force structure taken a disproportionate share of the force structure reductions?

Answer: No. The force structure reductions we propose are aimed at eliminating units that impose comparatively higher costs and are less efficient than other forces in our overall program. The Military Departments reviewed their entire force structure in the course of recommending specific actions. Key considerations in the choices you have inquired about are as follows:

Army Helicopters. We propose to retire the oldest, least productive aircraft in the inventory during FY 1988-1989. At the same time, we are adding to the force structure 149 AH-64 Apache attack helicopters, 144 UH-60 Blackhawk transport helicopters, and 60 OH-58D scout helicopters. The net effect of these changes is to increase our overall combat capability, with only a slight reduction in our utility and administrative support capabilities.

Navy 14th Carrier Airwing. The Navy's peacetime employment of aircraft carriers involves one ship always being non-operational in Service Life Extension Program (SLEP) status--a major shipyard work period that runs about two years in length--and an additional one to two ships being non-operational while in overhaul--also a major shipyard work period, lasting a year or more. The Navy has proposed to operate its fifteenth deployable aircraft carrier, upon delivery in FY 1990, with one of the two carrier airwings operated by the Navy Reserve. This efficient approach has been followed by this year's plan to operate a second carrier with the second of the two Reserve Component airwings. Thus we plan to maintain fifteen deployable carriers in the 1990s, as previously scheduled, and fifteen airwings, but two airwings will be drawn from the reserves. Operating fifteen active airwings would add flexibility and combat sustainability (freeing the reserve wings to act, in effect, as combat attrition fillers in wartime), but the need to meet budget constraints warrants further economies wherever they may be feasible.

Two Air Force Tactical Fighter Wings. We again propose, as in the FY 1988/89 President's Budget, the disestablishment of the 474th Tactical Fighter Wing (TFW) at Nellis AFB, Nevada. We have carefully reviewed the Air Force selection of this wing as the first choice for retirement. The routine pace of flight operations at Nellis AFB is intense, with numerous large force deployments being made to the base several times a year for the "Red Flag" series exercises being most notable. Very important tactics development and test operations also are conducted at Nellis AFB, including--for example--the 57th Fighter Weapons Wing (FWW) activity. The scale of "Red Flag" exercise activity has increased significantly since the early 1980s. The 474th TFW, unfortunately but inevitably, has had lower priority than these other units for access to range space, flight scheduling, etc.

These practical difficulties make it appropriate at lower budget levels to disband the wing and reallocate its F-16A/B aircraft to other uses.

The matter of a second fighter wing reflects in part the burden imposed on the overall Air Force active tactical force of maintaining overseas deployments as total force structure declines. The reductions in our previously anticipated schedule of active force F-16 squadrons have increased the ratio of time overseas for F-16 unit personnel. For example, the FY 1989 column of the FY 1988/89 President's Budget had called for 16 active F-16 squadrons in the Continental United States (CONUS) and 14 overseas. Disestablishment of the 474th TFW in Nevada, together with the deferral of the plan to establish one additional CONUS F-16 squadron elsewhere, reduces the number of CONUS-based F-16 squadrons to 12 squadrons at end-FY 1989. The hypothetical elimination of still another CONUS-based wing would change the CONUS to overseas ratio to 9 squadrons in CONUS and 14 overseas, clearly a major change that we considered undesirable. Accordingly, we tentatively plan to disestablish the 401st TFW presently located at Torrejon, Spain, instead of another CONUS-based wing, as the next step in active F-16 force structure reductions.

As you know, we plan to move the 401st out of Spain in any case as a result of recent negotiations with the Spanish government. Should we be successful in obtaining NATO support to move the 401st to another European NATO country, vitally important for the defense of NATO's southern flank, we would reconsider our Air Force force structure plans to select another wing for deactivation.

Reductions in Reserve Component strength reflect the need to balance the relative proportion of the active and reserve elements of the total force. As noted above, active force structure is tied in part to overseas basing as well as to contingency employment plans that justify the maintenance of the more costly active force elements. Reduction of Reserve Component aircraft squadron size from 24 to 18 Primary Aircraft Authorization (PAA) Combat strength, proposed in a few cases in FY 1989, clearly is undesirable. Given the need to maintain geographically dispersed Reserve Component units, to draw on personnel across the country where they are available, we chose to reduce unit size rather than disband entire units. This decision will permit us to more readily expand those units again in the future should that become possible.

FY 1988 Unfunded Requirements

Question: Mr. Secretary, the Congress just completed action on the 1988 Defense Budget in December, and now you indicate that you already have $4 billion in 1988 unfunded requirements. Please provide a detailed explanation of each of the unfunded requirements.

Answer: The information follows:

TOA, $ Millions

3,964

Reduced Stock Fund Refunds: 371

Congress reduced O&M funds by $1.2 billion assuming funding could be made up by refunds from the stock funds. The stock funds have sufficient cash to make only part of the needed amount. Consequently, program reductions of $371 million will be required in the O&M accounts.

Reduced Industrial Funds: 152

Congress intended refunds from the industrial funds (IF) of $395 million and reduced O&M accounts accordingly. Due to prior and projected losses, the IF's can only transfer $243 million. O&M programs must be reduced for the balance.

Foreign Currency Fund Shortfall: 930

This shortfall reflects adverse foreign currency exchange rates in relation to the dollar since submission of FY 1988 President's budget. Congress did not provide sufficient authority to replenish the foreign currency fund from which transfers are made to the O&M accounts for the variances. O&M will have to reduce program to pay for the higher exchange rates unless Congress provides the requested increase in transfer authority.

Civilian Pay Absorption: 416

Congress provided $875 million for the military pay raise and indicated that amounts not needed for it could partially fund the civilian pay raise. There were no funds left for the 2% civilian pay raise effective, January 1988. Absorption in the O&M accounts will force other reductions and deferrals.

Fuel Cost Increase: 361

In September DoD changed the FY 1988 budgeted composite fuel price from $23.94 to $26.46 per barrel. The increase reflects actual FY 1987 cost and the cash posture of the Defense stock funds which became known after submission of the initial FY 1988 budget. Thus the operating accounts must absorb the higher cost.

Health Benefits Cost Increase: 200

The average cost of DoD's share of health insurance costs for civilian employees rose 32% effective January 1988. Congress indicated a supplemental request would not be entertained for increased pay or related costs for either military or civilian personnel. Thus, the health benefit cost increase must be absorbed in the O&M accounts.

	TOA, $ Millions
CHAMPUS Costs Increase: CHAMPUS claims payments were halted at the end of FY 1987 due to a resource shortage. The carryover of these bills, $185 million, plus an increase in the number and cost of CHAMPUS claims projected for FY1988 over the amount budget leaves this account short in FY 1988. Other programs must be reduced to provide a source of reprograming for these medical claims costs.	643
Persian Gulf: The Persian Gulf operations are estimated at $275 million in FY 1988. This increase includes $10 million for imminent danger pay. The remaining $265 million is for Navy steaming and flying hours and airlift of supplies and equipment. Also covered is Army and Air Force operations. Congress provided $100 million to the O&M Navy appropriation in FY 1988. The remaining $175 million is being absorbed.	175
Overseas Station Allowances: The impact of the increased overseas station allowances results from the precipitous devaluation of the dollar against major currencies since submission of the FY 1988 budget request. The personnel appropriations are unable to absorb the impact of this increase.	458
INF Treaty Implementation: Funds provide for INF verification costs related to on-site U.S./USSR inspection activities, GLCM/Pershing elimination costs, and intelligence activities. These requirement were determined in December 1987 after the Treaty agreement between the two countries, twelve months after submission of the initial FY 1988 budget.	198
GSA Surcharge: GSA is now recovering overhead/administrative costs by means of a surcharge added to the cost of material acquired from the GSA stock fund. This requirement became known in December 1987 and is effective March 1, 1988. This increase is being absorbed in the O&M customer accounts.	64

RETIREMENT OF 16 FRIGATES

Question: Mr. Secretary, the Budget proposed by DoD provides over a two year period for early retirement of 16 navy frigates at a savings of $166 million. This decision prevents the Navy from achieving the 600 ship force goal in FY 1989 as planned. What is the reason for this decision?

Answer: As a result of the budget summit agreement, the Department was directed to reduce the FY 1989 budget request by

$33 billion. My guidance was that I would choose a smaller force that was fully ready rather than a larger force that was not ready. The deactivation of the frigates is necessary to reach the reduced DoD topline budget amount while avoiding a hollow naval force. The frigates are older ships with limited capability. They have a unique propulsion system that is difficult to maintain and currently they are not deployed with battlegroups. Although the Navy will not reach the goal of 600 ships in FY 1989, we felt that this force structure change would result in significant savings with the minimum impact on capability and the Navy's ability to perform its mission.

Question: What options did the Navy consider as alternatives to the ship retirement plan?

Answer: The budget decisions were arrived at after a series of discussions on many alternatives or options. No specific alternative was offered to the ship retirement plan.

Question: What was the position of the Navy leadership and the Joint Chief of Staff on this proposal?

Answer: As you know, the former Secretary of the Navy, Mr. Webb, cited the retirement of the 16 frigates as his major reason for resigning. The Department leadership discussed the various options and alternatives available to achieve the $33 billion reduction. The President's budget is the result of the decisions emanating from those discussions.

Question: What is your view of a proposal to put these ships in the Navy Reserve?

Answer: I would not support putting the frigates in the Reserves. We have found that weapon systems unique to the Reserve Components tend to create manning problems in technical specialties because there is no flow of trained personnel for these weapon systems from the active Service. Additionally, spare parts and supplies become scarce when the active Service no longer keeps the production lines open.

Question: DoD has proposed a 4.3% pay raise. How much of a percentage reduction in this pay raise would be necessary to finance the retention of the 16 frigates?

Answer: The pay raise would be reduced from 4.3% to approximately 4.0% to finance the frigates. I would not, however, support a reduction to the proposed pay raise. Military pay raises have been capped below private sector wages since 1983. As a result, the military pay comparability gap has increased to 11 percent. We must avoid repeating the costly mistake of the 1970s when military compensation and other programs could not attract talented, ambitious, hard working youth. This triggered a full-scale military manpower crisis and endangered the all-volunteer force. It is inevitable that DoD will be unable to attract and keep high-quality people if pay caps continue. To prevent this, the Administration considers it crucial there be no further erosion in the value of military compensation. The 4.3 percent pay raise would match projected private sector wage growth and prevent military pay from falling further behind.

Distribution of Funds among the Military Services

Question: Mr. Secretary, overall, DoD has about 1% real decline in 1989 as compared to 1988. However, the Air Force and the Defense Agencies have real declines of 6.6% and 5.6% respectively while the Navy and the Army have real declines of 6.6% and about 1% respectively in the budget.

What is the rationale for the large real growth in the Air Force and the Defense Agencies?

How would the Navy real decline change if the 16 frigates were restored to the Navy budget?

Answer: The severe reductions the Air Force and the Defense Agencies experienced in FY 1988 led to the larger real growth in FY 1989. Real budget authority for both the Air Force and the Defense Agencies in FY 1989 is lower than FY 1987.

The Navy will retire 8 frigates in FY 1988 and 8 in FY 1989. The savings in FY 1989 from this action will be $166 million. If these ships were not retired, the Navy real decline for FY 1989 would be 6.6 percent, rather than 6.8 percent.

Small ICBM

Question: Why did the administration choose not to fully fund the 1989 program for the Small ICBM?

Answer: After a review of the Small ICBM program, I decided that we could not afford to develop and acquire the Small ICBM within the funding levels that will be available to us in the near future. I also had serious doubts that the program would be cost-effective at budget levels even higher than those we can reasonably forsee.

Question: Is the $200 million funding level requested in 1989 sufficient to preserve the final development decision for the next President?

Answer: The $200.0 in FY 1989 together with the $700 million appropriated in FY 1988 is sufficient to ensure that research and development for both the missile and the hard mobile launcher basing mode continues and that the contracting mechanisms are kept intact so that the next administration may restart the program, if desired.

A-6 AIRCRAFT REMANUFACTURE PLANS

QUESTION: Mr. Secretary, I understand you are supporting a remanufacture program for A-6 aircraft instead of producing new aircraft. Is it your position that a remanufacturing program is a better use of the available resources than producing additional aircraft?

ANSWER: The Navy requires the advanced capabilities, improved reliability and maintainability, and enhanced survivability inherent in the digital A-6. There is a need for the digital A-6 to bridge fleet capabilities until the A-12 is fully deployed.

QUESTION: Mr. Secretary, what are the cost savings of a remanufacture program compared to producing new aircraft?

ANSWER: Development and remanufacturing of 167 digital A-6's provides an approximate cost avoidance of $3 billion when compared to the development and production of 150 new A-6F's.

QUESTION: Mr. Secretary, can you tell us what impact of the remanufacture program will be for the installation of the new composite wing on A-6E aircraft?

ANSWER: Initial composite wing plans called for production of 336 wings from FY 1986 through FY 1990. These wings were to be allocated as follows.

150	New production A-6F's
11	New production A-6E's
175	Block I Upgrade/Systems Weapons Improvement Program (A-6E)
336	Total

The termination of the A-6F, and the resulting A-6G program, restructures this plan as follows.

167	A-6G Remanufacture
103	Block I Upgrade/Systems Weapons Improvement Program (A-6E)
270	Total

To summarize, although the revised rewing program to support A-6G significantly reduces the total Aircraft Procurement, Navy requirement, it also significantly increases the number of existing A-6E's that will be rewinged with the new 8800 hour composite wing.

QUESTION: Mr. Secretary, will the on-going A-6E rewinging contracts be reduced because of the decision to remanufacture instead of produce new aircraft?

ANSWER: Yes. The total number of composite wings has been reduced because of the termination of the A-6F program.

QUESTION: Do you believe the Navy can support additional production of A-6 aircraft, an A-6 remanufacturing program, the necessary production of A-6 rewinging, and SWIP program, and keep the Advanced Tactical Aircraft on schedule considering the resources available for Navy aircraft programs?

ANSWER: The Navy's constrained aircraft procurement budget has necessitated a review of program - plans for the outyears. This analysis is being pursued as an element of Program Objective Memorandum 1990. The A-12 program remains our top priority.

Fiscal Year 1988 Supplemental

Question: Mr. Secretary, I understand the administration will propose a supplemental appropriations request to modify existing authority to transfer funds raising the legal limit to $4 billion. Why is this increase necessary considering that authority was already increased to $1.5 billion in FY 1988?

Answer: The increase in transfer authority is necessary due to problems in program execution caused by sizeable FY 1988 Operation and Maintenance appropriation reductions in conjunction with very large increases in uncontrollable costs. The current level of transfer authority will be rapidly consumed by the requirements of the INF Treaty, increased CHAMPUS costs, pay raise absorption, and higher fuel costs. The additional amount will be needed to cover additional unfunded requirements resulting from the decline in the value of the dollar, including Overseas Station Allowance, industrial/stock fund transfer refunds, Persian Gulf operations, Civilian Health Service costs, and the GSA stock fund surcharge.

Question: Since $1.5 billion in authority is already available, can you tell us how much of the $1.5 billion has already been proposed and how much approved?

Answer: Of the $1.5 billion already available for FY 1988, $788.1 million has been proposed for transfer in the Amended FY 1988/1989 Biennial budget. Necessary reprograming actions for the proposed $788.1 million require transmission to the congressional committees and approval prior to actual processing of the transfers. Although the $788.1 million is all that was actually included in the budget, unfunded requirements exist in the Military Personnel and Operation and Maintenance appropriations. If these requirements cannot be absorbed in the appropriations sustaining the shortfall, reprograming actions and the use of general transfer authority will be necessary.

Question: In 1986 the Congress provided $950 million in general transfer authority, in 1987 this was increased to $1.1 billion and last year it was raised to $1.5 billion. Can you tell us what percent of each of these amounts has been transferred?

Answer: Of the $950 million of general transfer authority in 1986, 64 percent has been transferred with another 7 percent awaiting congressional approval for transfer. Of the $1.6 billion of general transfer authority in 1987 (an additional $.5 billion was added in the Supplemental), 58 percent has been transferred, with another 13 percent proposed for transfer. None of the $1.5 billion general transfer authority for 1988 has thus far been transferred. Applicable reprograming actions that use general transfer authority require transmission to the congressional committees and approval prior to actual processing of the transfers. Although the amounts transferred so far are below the total amount of general transfer authority provided, it is important to realize that the years mentioned still have available procurement and research and development funds for obligation, and accordingly will continue to use general transfer authority.

Question: Considering the remaining transfer authority for 1988 and prior years, why isn't this amount sufficient to meet your requirements?

Answer: The unfunded requirements for FY 1988 total $4.0 billion. The Congress has set the current level of transfer authority for FY 1988 at $1.5 billion, clearly not enough to accommodate the unexpected increased operations costs.

Question: Mr. Secretary, if the additional authority is provided, which programs will be the sources for transferring $4 billion?

Answer: The sources have not yet been specifically identified but lower priority programs will be the candidates for transfers utilizing the additional requested transfer authority. Specific programs would be identified as decisions are made regarding submission of the reprograming actions. Actions requiring the use of General Transfer Authority would be transmitted in the normal manner via DD1415 Reprograming Action to the committees for approval prior to implementation.

Question: Does your support of increasing transfer authority imply that $4 billion in excess funds are available in the Department of Defense?

Answer: This in no way implies that there is $4 billion in excess funds. The increased transfer authority level will enable the Department to protect our critical readiness needs and provide DoD managers the necessary flexibility to do their jobs efficiently and effectively. The offsets will come from lower priority programs, which have not been identified at this time.

Question: Mr. Secretary, can you please provide for the record a listing by appropriations account of the sources and receiving accounts of the increased transfer authority.

Answer: We have not yet fully identified the offsetting funding sources for these requirements or to what extent these offsets will come from within the accounts experiencing the unfunded requirements. We will identify the offsets and receiving accounts as the decisions are made regarding submission of the reprograming actions.

Question: Mr. Secretary, what will be the impact on defense outlays for fiscal year 1988 if the transfer threshold is raised to $4 billion? Will increasing the transfer limitation cause outlays to increase above the level agreed to in the budget summit agreement for 1988 $285.6 billion?

Answer: We do not expect the increase in the transfer threshold to increase our outlays for FY 1988 above the level agreed to in the budget summit agreement.

Question: How will you control outlays to ensure the budget Summit agreement will not be breeched?

Answer: The Department has in the past monitored outlays throughout the year and will continue to do so. The Services are aware of the necessity of complying with the outlay constraints of the Budget Summit agreement and will be working with OSD to manage within the outlays the Congress provided.

Question: What specific activities will be taken and how much does each action save on 1988 outlays?

Answer: The Department monitors outlays throughout the year and is prepared to identify any anomolies in the rate of outlays at an early stage. In the course of reviewing outlays during the year, necessary management action will be exercised to manage within the level provided by Congress.

Question: What historical evidence can you provide which demonstrates that DoD can "manage" outlays?

Answer: The Department of Defense is constantly reviewing and monitoring outlays and has over the last five year period averaged 99.3% of our projected outlay estimate.

ATB CAPABILITY

Question: Mr. Secretary, the capability of the ATB to hit Soviet targets appears to have been downgraded by the Joint Chiefs of Staff. Last year, the chiefs said in their annual posture statement that when the ATB is deployed by the Air Force in the 1990s, it will "ensure a continued U.S. capability to penetrate Soviet airspace and attack the full range of fixed and relocatable targets." This year, the Chiefs' statement said the ATB "will ensure a continued U.S. capability to penetrate hostile airspace to attack the full range of fixed targets, and present an increased threat to some relocatable targets." What is the significance of the latest Joint Chiefs of Staff statement concerning the ATB capability?

Answer: [Deleted.]

AIR FORCE TACTICAL FIGHTER WINGS

QUESTION: If the 401st Tactical Fighter Wing is relocated within Europe, how will the Department allocate the reduction proposed in the budget? Will aircraft and personnel reduction be made in Continental U.S. Air Force Wings?

ANSWER: Since relocation of the 401 Tactical Fighter Wing to another NATO southern region country is being studied by the alliance at this time, it would be premature to postulate alternatives to the stated position that the 401st will begin deactivation in the last quarter of Fiscal Year 1989. Should NATO agree to satisfactory financial arrangements for relocation of the 401st in Europe, then discussion of alternative CONUS or other overseas unit reductions would be appropriate.

Question: Mr. Secretary, your statement indicates that the budget proposes to reduce to 36 Tactical Fighter Wings. Secretary Carlucci's statement before the Senate Armed Services Committee on February 18, 1988, states that the budget proposes to reduce to 35 Wings. Which is correct?

Answer: Our force reduction proposal for the Air Force would reduce the number of equivalent Tactical Fighter Wings to 36 in FY 1989 and 35 by FY 1990.

Coast Guard Support

Questions: Mr. Secretary, the 1988 Appropriations Actions Act (Section 8136) requires the Department of Defense to provide not less than $105 million in supplies, fuel, training assistance and other operational support for the Coast Guard. Could you please provide a status report on implementation of this provision. Could you describe how this credit system will work? Do you think this system is preferable to the $100 million transfer of Defense funds to the Coast Guard provided for in FY 1987?

Answer: The Department is working with the Coast Guard on a daily basis to implement this provision of law. An agreement providing implementing details will be completed this month (March 1988). Refunds will be provided to the Coast Guard for charges made to the Coast Guard in the early part of the fiscal year and credits will be extended for future requirements.

The effect of this provision is to reduce the assets of the Defense Department without providing the reimbursements to replace them. Additional funds will be budgeted in FY 1990 to replenish approved inventory levels depleted by this action.

The reimbursement procedures required to implement section 8136 entailed substantial effort. Significant accounting adjustments are required to implement this section. Coast Guard business with DoD had to be analyzed to determine the accounts in which credit could be given. These accounts may vary as Coast Guard operations vary. Additionally, the procedure does not generate efficiencies through consolidation of Coast Guard procurements with those of Defense as suggested in the Appropriation

Conference Report. Because the items to be provided without reimbursement are routinely provided to the Coast Guard, they do not represent additional procurements and there are no additional buying efficiencies to be realized. In view of the administrative and accounting adjustments required to implement this direction and the unreimbursed drawdown of DoD inventory to support it, this method of supporting Coast Guard requirements should not be repeated.

Question: You have stated that some of our allies have contributed to paying some of the costs of our presence in the Persian Gulf. Provide for the record the amount of funds each nation has contributed since our increased Persian Gulf presence began in late 1987, and how much each nation has agreed to contribute in FY 1989?

Answer: Often we are questioned about the contributions of our GCC friends and European allies to our protection regime in the Gulf. It is important that you understand that we could not achieve the success that we enjoy today without their help. While, for political and security reasons, I prefer not to be specific as to exact numbers and countries, I can give you a rough order of magnitude.

From the Gulf states, we get help in direct contributions of fuel for ships and aircraft, food and billeting for some of our military personnel, port services and ship repairs, and landing and overflight rights to mention some of the more important items. We attempted to provide some figures for ourselves on this assistance to gauge the value of the support provided. While there may be some double counting involved in trying to quantify the value of goods and services provided gratis, since we never receive a bill for such help, according to our calculations, contributions (most of them in kind) have reduced our incremental costs in the Gulf by approximately one-third. This really does not account for other additional support which cannot be quantified in dollar terms, but is no less valuable - such as overflight clearances mentioned above.

Our European allies make no direct contribution to us in terms of financial assistance, but they participate in a much more meaningful way. The British, French, Italians, Dutch and Belgians all have forces in the Gulf helping protect non-belligerent shipping and contributing to the total minesweeping capability in the Gulf. The FRG helps by backfilling with naval forces in the Mediterranean, and Japan contributes with financial offsets for U.S. forces in Japan as well as navigational equipment in the Gulf and aid to regional Arab states.

Force Structure

Question: Please provide details on the major force structure changes proposed in the budget. Please provide: 1) rationale for the reduction: 2) baseline operation and support costs and personnel (military and civilian) for each unit (by appropriation: 3) the planned schedule for force reduction and 4) savings by appropriation account in 1988, 1989 and 1990.

Answer: The major force structure changes proposed in the budget are listed below by Service. All of the force structure changes listed were made to accomodate the reduced resources available to the Department of Defense in FY 1989. All dollar savings are expressed in millions.

Army

- Deactivate one active brigade of the 9th Infantry Division (Motorized) at Fort Lewis, Washington (4th Qtr/FY 1988).

Savings

Appn	Baseline	FY 1988	FY 1989	FY 1990
O&M, A	40.0	-6.9	-58.3	-42.5
MPA	80.7	-10.0	-97.9	-82.3
Total	120.7	-16.9	-156.2	-124.8
Personnel				
Military E/S	2,893	-2,893	-2,893	-2,893
Civilian E/S	240	-240	-240	-240

- Deactivate the Army National Guard ROLAND unit in New Mexico (4th Qtr/FY 1988). Reassign 293 Active Guard/Reserve (AGR) personnel and 115 drilling reserves to CHAPARRAL and HAWK battalions.

Savings

Appn	Baseline	FY 1988	FY 1989	FY 1990
O&M, ARNG	37.0	-	-38.0	-39.0
Personnel				
Military E/S	408	-	-	-
Civilian E/S	-	-	-	-

- Cancel planned FY 1989 activation of two 6th Infantry Division (Light) battalions in Alaska, one at Fort Richardson in October 1988 and one at Fort Wainwright in May 1989.

Savings

Appn	Baseline	FY 1988	FY 1989	FY 1990
O&M, A	20.4	-2.6	-28.2	-21.9
MPA	36.2	-4.3	-43.9	-36.9
Total	56.6	-6.9	-72.1	-58.8
Personnel				
Military E/S	1,297	-1,297	-1,297	-1,297
Civilian E/S	114	-114	-114	-114

-Retire 170 OH-58/UH-1 scout aircraft from Army units worldwide, January through September 1989. Retire additional 742 OH-58/UH-1 scout aircraft in FY 1990 through FY 1994.

Army - Continued

Savings

Appn	Baseline 1/	FY 1988	FY 1989	FY 1990
O&M, A	32.0	-	-3.0	-10.3
APA	7.0	-	-	-5.3
Total	39.0	-	-3.0	-15.6
Personnel				
Military	-	-	-	-
Civilian	-	-	-	-

- Retire 100 OH-58 and 350 UH-1 utility aircraft from Army installations worldwide (May-September 1988).

Savings

Appn	Baseline	FY 1988	FY 1989	FY 1990
O&M,A	30.6	-3.3	-40.8	-60.4
MPA	61.4	-7.7	-74.4	-62.5
APA	4.3		-4.6	-4.7
Total	96.3	-11.0	-119.8	-127.6
Personnel				
Military E/S	2,200	-2,200	-2,200	-2,200
Civilian E/S	-	-	-	-

1/ Based on retirement of 912 aircraft through FY 1993.

Navy

- Deactivate the 14th airwing at Miramar Naval Air Station, California by the beginning of FY 1989. The airwing was scheduled to be fully operational by June 1988. Aircraft and pilots will be reassigned to fill shortages in other airwings.

Savings

Appn	Baseline	FY 1988	FY 1989	FY 1990
OMN	69.7	-	-69.7	-86.0
MPN	56.9	-	-25.8	-32.0
TOTAL	126.6	-	-95.5	-118.0
Personnel				
Military E/S	1,600	-	-1,600	-1,600
Civilian E/S	-	-	-	-

- Deactivate the strategic submarine SSBN 620 beginning in FY 1989. Deactivation will be completed by the end of FY 1990. Part of the crew will remain with the SSBN until deactivation is complete.

Navy - Continued

Savings

Appn	Baseline	FY 1988	FY 1989	FY 1990
OMN	2.4	-	-115.4	-2.5
MPN	5.3	-	-.2	-.2.5
TOTAL	7.7	-	-115.6	-5.0

Personnel				
Military E/S	181	-	-11	-181
Civilian E/S	-	-	-	-

- Retire 8 frigates in FY 1988 and 8 in FY 1989 (6 Brooke (FFG 1) class and 10 Garcia (FF 1040) class).

Savings

Appn	Baseline	FY 1988	FY 1989	FY 1990
OMN	105.1	-26.8	-99.5	-103.8
MPN	144.9	-	-66.7	-79.1
TOTAL	250.0	-26.8	-166.2	-182.9

Personnel				
Military E/S	4,400	-	-4,400	-4,400
Civilian E/S	-	-	-	-

Air Force

- Deactivates the 401st airwing in Spain by FY 1990 (one squadron of 24 F-16's beginning in 4th Qtr FY 1989).

Savings

Appn	Baseline	FY 1988	FY 1989	FY 1990
OMAF	56.4	-	-4.7	-37.5
MPAF	72.1	-	-6.1	-48.0
APAF	42.4	-	-3.5	-28.2
OPAF	8.8	-	-.7	-5.9
TOTAL	179.7	-	-15.0	-119.6

Personnel				
Military E/S	2,103	-	-700	-2,103
Civilian E/S	84	-	-39	-84

- Deactivates the 474th Tactical Fighter Wing at Nellis Air Force Base (AFB). Reassigns F-16 aircraft to the Air Reserve Force units located in Oklahoma, New York, and Kansas. Remaining F-16's stay at Nellis AFB to modernize the aggressor unit. Aging Reserve Force F-4's are retired. This conversion was budgeted to occur in FY 1988, but was denied by Congress. Hence, there is a one-time increase required to finance conversion during FY 1989.

Air Force - Continued

Savings

Appn	Baseline	FY 1988	FY 1989	FY 1990
OMAF	56.4	-	+28.5	-
MPAF	72.4	-	+27.7	-
APAF	42.4	-	+.5	-
OPAF	8.8	-	-	-
TOTAL	179.7	-	+56.7	-
Personnel				
Military E/S	-	-	-	-
Civilian E/S	-	-	-	-

- Reduces SR-71 program in FY 1989.

Savings

Appn	Baseline	FY 1988	FY 1989	FY 1990
OMAF	Data	-	-84.8	-98.5
MPAF	Classified	-	-16.0	-16.0
APAF				
		-	-10.1	-20.1
RDT&E		-	-8.1	-8.1
TOTAL		-	-119.0	-142.7
Personnel				
Military E/S	Data	-	-548	-548
Civilian E/S	Classified	-	21	21

- Reduces twelve Guard and Reserve tactical fighter squadrons from 24 to 18 aircraft each by end FY 1991. One Reserve F-16 squadron in Oklahoma is reduced by six aircraft in 3rd Qtr FY 1989. Full year savings occur in FY 1992.

Savings

Appn	Baseline	FY 1988	FY 1989	FY 1990
OMAFR	7.9	-	-1.4	-5.0
OMANG	24.2	-	-	-8.8
RPAF	2.3	-	-.4	-1.7
NGPAF	8.2	-	-	-2.5
APAF	9.1	-	-1.4	-4.5
TOTAL	51.7	-	-3.2	-22.5
Personnel				
Military E/S	1,908	-	-159	-954
Civilian E/S	264	-	-22	-132

Foreign Currency

Question: Mr. Secretary, you've described many changes to the original 1989 budget request. One change you did not make, however, is unusual. The amended 1989 budget did not amend foreign currency rates to reflect current world currency rates. Thus appropriations are requested for a German Mark rate of 2.06 marks to the U.S. dollar, while the current rate is 1.69 marks to the dollar. The effect of this decision results in your appropriation request being understated by over $1 billion.

Why did the Department choose not to update currency rates? Isn't this use of past-year currency rates counter to standard Department of Defense budget procedures?

Answer: During the recent budget review, the Department considered revising the FY 1989 foreign currency rates reflected in the President's budget request. However, the Department did not revised rates because of the required deep cuts that had to be taken in the Defense budget and the uncertainty concerning the foreign currency rates that would be in effect in FY 1989.

Question: How does the Department propose to fund these foreign currency costs if rates do not return to the levels assumed in the budget?

Answer: If the U.S. dollar does not increase in value during the execution of FY 1989 overseas operating programs, the Department will have to transfer funds from the Foreign Currency Fluctuations, Defense appropriation to the various Operation and Maintenance appropriations in order to finance the funding shortfall. In order to ensure there are adequate assets in the Foreign Currency Fluctuations, Defense appropriation to finance the shortfall, it is essential that the Congress provide DoD with the authority to transfer unobligated balances from various expired accounts to the Foreign Currency Fluctuations, Defense appropriation. If this authority is not provided, then DoD will have to reduce programs to pay for increased funding due to unfavorable exchange rates.

CHAMPUS

Question: Since the 1987 appropriation, the annual estimate for CHAMPUS has increased rapidly. In 1987, the Congress appropriated $1,559 million. Congress later added a supplemental appropriation of $425 million, a 27 percent increase. In 1988, CHAMPUS was again increased to $2,111 million - - - but your testimony indicates that another $645 million is required. Thus, in a year and a half, it appears that the estimates for CHAMPUS funding have increased by over 75 percent, from $1.6 billion to almost $2.8 billion!

Question: Mr. Secretary, how do you propose to get CHAMPUS costs under control?

Answer: Medical costs have risen generally at a much faster rate than has inflation for the economy as a whole. It has been difficult to precisely predict that rate of cost increase, as it is difficult to forecast work load based on when and to what extent people will need medical care. The Department has relied heavily on its automated acturial model to estimate CHAMPUS work load and costs. While the model functions quite well in predicting future trends based on historical CHAMPUS data, it is unable to predict the amounts of care extended in the direct care system. In recent years, significant amounts of care have been shifted from the direct care system to CHAMPUS, quickly dating estimates made by this model. The Department has undertaken a number of initiatives to limit the shift of work load from the direct care system to CHAMPUS and to foster improved and more cost effective care in both the direct care system and the CHAMPUS program. Some examples are, PROJECT RESTORE, an initiative to reverse the recent work load shifting trends to CHAMPUS by restoring levels of medical services in military facilities. The project imparts clear financial responsibility and authority to the Services and sets realistic goals for reducing nonavailability statements to the FY 1986 levels; Catchment Area Demonstrations, this project will institute the concept of placing all medical resources for a defined population in the hands of the military hospital commander along with the responsibility for ensuring that cost effective care is provided to all area beneficiaries, through the MTF, civilian providers, contract support or other techniques of providing care on a least cost basis; Joint Military Medical Commands combines Service activities and saves resources; and the Diagnostic Related Group (DRG) based payment system for CHAMPUS will significantly lower CHAMPUS costs. These and other initiatives are being implemented and studied by the department in an attempt to bring the dramatically rising medical costs under control.

Question: What level of CHAMPUS funding is assumed in the FY 1989 revised budget?
Answer: The revised FY 1989 estimate for total CHAMPUS costs amounts to $2,556.5 thousand.

Question: Can the budget afford the CHAMPUS program? Don't we stand the risk of Defense health programs consuming Operation and Maintenance mission funding?
Answer: If we cannot control the continuing escalation of costs, then the only other viable alternative is to substantively change the CHAMPUS benefit package and force the Serviceman to pay a greater share of the costs of health care out of his or her own salary.

Civilian Furloughs

Question: Why is the Department making such a temporary reduction? Given the budget problems DoD faces in the outyears, won't you have to repeat the furlough policy next year and thereafter unless you take some definite action to reduce personnel?

Answer: The Department's civilian workforce levels are based on funded workloads and mission requirements. We still have our missions to perform and the work to do. Furloughs are a way of reducing civilian pay costs without eliminating trained workers from our employment rolls. The furloughs you refer to are a result of funding reductions the Congress made in the Department's FY 1988 budget request. We had to do this in order to ensure that we could accommodate approved [illegible]ing levels. The Department's amended FY 1989 budget request re[illegible]s a reduction of 31,000 civilian spaces from the budget request we submitted last year. If the Congress does not approve the funding request in our amended FY 1989 request, we may again have to furlough civilian employees.

Question: If a furlough is really necessary this year, why not apply a furlough for all DoD employees? This would have a minimal impact on all employees instead of a significant impact on a few.

Answer: The Congress authorizes and appropriates the Operation and Maintenance money which pays most of the Department's civilian manpower on an Appropriation basis. That means that since there is currently a potential funding problem in the O&M Air Force appropriation, the Air Force has chosen to consider civilian workforce furloughs as one of the methods to accommodate this problem. Each Military Service has the authority to manage their own appropriations as they see fit, and they are free to use any means, including attrition and reductions in force to manage the problem.

The way that the Congress authorizes and appropriates funding, the Defense Department cannot spread a funding shortfall in one appropriation to other appropriations without a reprogramming request. We have requested that transfer authority be increased to accommodate this problem and others which will probably occur this year.

Question: Mr. Secretary, the Air Force has announced that it intends to furlough 84,000 Air Logistics Command civilian employees for up to 10 days. Did you or Secretary Carlucci approve this action prior to the Air Force's announcement last month? Are there other furloughs in the mill or under consideration?

Answer: The Air Force Logistics Command announcement was made in the context of our general policy to maintain readiness. The AFLC Commander made a decision, in which he chose between readiness, sustainability and maintaining the work force. Faced with hard budget realities, he considered using a small furlough a better option than letting people go. We respect his decision.

It is possible that other furloughs may be considered as we progress through the fiscal year. We have a very tight outlay target for '88, which we are committed to meet and we are going to meet it. And to do so, we will be managing our work force on a day to day basis.

Question: Why doesn't the budget propose using any of the existing $1.5 billion transfer authority granted in the FY 1988 appropriation to avoid this impact?

Answer: Of the $1.5 billion in transfer authority, over one-third has been used to provide funding for increased O&M requirements.

Question: Our understanding is that the funding needed to avoid Air Force furloughs is $69 million within the $19.7 billion Air Force Operation and Maintenance account. Is this correct?

Answer: The constrained FY 1988 Operation and Maintenance funding has caused severe civilian pay problems across the Air

Force. Most commands are examining the possibility of furloughing employees pending the effectiveness of these actions and reductions to non-civilian pay expenses in solving funding shortfalls. The initial number of $69 million was an AFLC estimate of funding required to prevent a 6 day furlough. Since that time, $19 million has been provided to AFLC through reprioritization efforts, while Air Force Communications Command has indicated they now require $7 million to prevent a furlough of their civilian workforce. The combination of events plus a reestimation of costs by AFLC result in a current requirement of $53 million to prevent furlough action. You should be aware however, that several other major commands have the potential for furlough actions should their other cost reduction measures prove unsuccessful. We will continue to explore all options to preclude or minimize furloughs.

Question: Congress did not make specific reductions against this command and, in fact, funded depot maintenance at the President's budget request. Why has the Air Force Logisitics Command proposed this action?

Answer: While Congress fully funded Depot Maintenance, budget cuts in other categories reduced Air Force Logistics Command's (AFLC) overall funding. Congressional reductions and other directed appropriation transfers for AFLC were $463.2 million. Even after exercising two early out retirement programs, implementing a hiring freeze, reducing overtime, performance awards, infrastructure, and quality-of-life programs, it currently appears probable that AFLC will have to furlough civilian employees to live within available resources.

MX

Question: Defense Secretary Carlucci thinks deploying all 100 MX missiles on rail cars is a prudent decision and if train deployed MX missiles are more survivable than MX's in silos, why should we continue to deploy 50 MX in silos instead of deploying more than 50 in trains as soon as possible.

Answer: The reason why we are continuing to deploy the Peacekeeper Missiles in Minuteman silos is that Rail Garrison will not be available until 1991 and then only if Congress approves this basing system. The current silo deployment scheme meets our operational need to field this sytem now to meet the immediate threat. Our long range goal is to base the MX missile in the most survivable mode and thus our goal is to eventually have all 100 missiles in the Rail Garrison basing.

SMALL ICBM

QUESTION. The Air Force recommended that the Small ICBM program be terminated essentially because it is unaffordable, and Secretary Carlucci has indicated he agrees with the decision. Assistant Secretary (Comptroller) Helm has said that the total cost of the

Small ICBM is simply not cost effective compared to the Rail Garrison MX basing system. I also understand that a new independent cost estimate has been done which indicates that the acquisition cost of the Rail Garrison basing mode could be $1.7 billion less than previously estimated.

Do you have any evidence to suggest that the Small ICBM is any more affordable and cost effective than the MX Missile in the Rail Garrison basing mode, and what can you tell us about this new cost estimate for Rail Garrison deployment?

In view of the recommendations to terminate the Small ICBM, is your Department committed to fully funding the MX/Rail Garrison program in the out years to maintain the 1991 operational capability for MX rail basing?

ANSWER Both an Air Force program office cost estimate and an independent cost estimate of the Rail Garrison basing mode have just been submitted to the Office of the Secretary of Defense. These estimates are a part of the information needed to decide to commence full-scale development. They showed the cost of this basing mode will be $7.4 billion. Adding the costs of missile procurement and the annual operating costs gives a life cycle cost of the 50 missile system (500 reentry vehicles) of $13 billion. This compares to the most recent estimate of life cycle cost for 500 Small ICBMs which is $37.6 billion.

We do not believe all of the Department's budget problems have been solved for the out years. The Department's process of formally considering the out year budgets is just about to start. It is premature to state the results of this process. But we can say that deploying Peacekeeper missiles in Rail Garrison as expeditiously as possible will be a high priority item in our deliberations.

VERTICAL LAUNCH ASROC

QUESTION: The budget defers funds to initiate production of the Vertical Launch ASROC (Antisubmarine Rocket) program. It is my understanding that the recent flight tests have been completely successful and ships are being deployed with the Vertical Launching System installed but lacking the rockets for quick reaction ASW capability. Under your plan to defer production, how many ships will be deployed before the Vertical Launch ASROC capability is available to the fleet?

ANSWER: Based upon the current MK-41 Vertical Launching (VLS) installation schedule, when Vertical Launch ASROC is [deleted] [deleted]. Overseas deployment of these [deleted] is determined by the Fleet Commanders based upon operating/employment schedules.

QUESTION: Under your plan to defer production, when will the intial Navy ship receive ASROC protection?

ANSWER: The current [deleted] [deleted]. However, as part of the FY-90 Five Year Defense Plan deliberations, the Department of Defense is assessing options to improve our ASW standoff weapon capability. Should any change to the current Vertical Launch ASROC program accrue as a result of this review, the Congress will be promptly notified.

QUESTION: What are the alternatives to accomodate the fleet requirement for intermediate range ASW capability until the fleet antisubmarine rockets are available?

ANSWER: Ships will continue to employ LAMPS and other ASW aircraft in intermediate range ASW prosecutions. Over-the-side torpedo capability still exists to engage the shorter range threat.

Peacekeeper (MX) Missile

Question: Mr. Secretary, you have testified that a rail garrison basing mode is being developed and 8 of the 12 Peacekeeper Missiles requested in fiscal year 1989 will be for potential deployment in rail garrison in late 1991. With the continued delivery problems of the inertial measuring unit for the MX guidance package, will the 50 silo based MX missiles be fully operational prior to the first rail garrison deployments?

Answer: First let me address the Peackeeper Procurement in FY 1989. Regardless of future basing decisions and regardless of whether Congress ultimately decides to deploy only 50 missiles instead of 100, the 12 missiles requested in FY 1989 are needed. In the event Congress decides not to proceed with the rail garrison program, the 12 missiles in the FY 1989 program will be used to support the long-run testing program for missiles already deployed. Concerning the Peacekeeper operational readiness, of the 34 missiles delivered to SAC, 22 are operationally ready and on alert. While readiness is lower than we would desire at this point in the deployment because of late deliveries of guidance systems, we have increased our production and repair capabilities on the guidance package and we expect to be fully operational by the end of this year with 50 missiles on alert.

AGM-130 MISSILE

QUESTION: You have testified that the Air Force's AGM-130 missile program has been terminated because of technical problems encountered in development flight testing. If these technical problems are solved by the contractor using their own funds, would you consider restarting this development program in the future?

ANSWER: The Air Force deleted all AGM-130 production funds due to development problems. We still, however, support testing of the previously purchased weapons (18-AGM-130/TV) and development of the improved data link and support equipment which is common to both the AGM-130 and GBU-15 weapons. The missile contractor, Rockwell, has pledged to do "whatever it takes" to insure the success of the AGM-130 missile test program. Based on this strong contractor commitment, the Air Force plans to continue testing of the previously purchased missiles. If the weapon works well in the upcoming tests, it will compete for production funds in future Air Force budgets.

QUESTION. Mr. Secretary, your budget calls for the deactivation of the Roland Air Defense Missile Battalion of the New Mexico National Guard. The American taxpayers have invested over $1.5 billion for this equipment to date. What are the Department of Defense's plans for this equipment?

ANSWER. We are currently looking at four options and their associated costs. These four options are FMS/Security Assistance, interservice transfer, storage for future use, and disposal.

QUESTION. Is there a possibility of the sale of this equipment to one of our allies?

ANSWER. Of the four options that we are considering, FMS/Security Assistance is our preferred course.

QUESTION. What would be the cost to retrofit this system and deploy the fire units around U.S. and co-located air bases in Europe which are currently lacking in air defense coverage?

ANSWER. Total cost to retrofit and exchange the carriers for the 27 fire units is estimated to be about $207M. If only the carriers are exchanged and the fire units are transferred without retrofit, the cost will be about $10M. However, this will incur about $25M per year for contractor maintenance support of the fire units.

ECONOMIC PRODUCTION RATES

Question: Mr. Secretary, would you provide for the record a list of all DoD programs that are either currently, or in your budget request, being produced below the minimum economic rates of production.

Answer: The planned FY89 production rates for 30 of the 34 major defense acquisition programs in our amended request meet or exceed their minimum economic production rates. The four programs that do not are the:

a. AV-8B which has an FY89 planned production of 24 aircraft (the FY88 appropriated quantity) under a three year multi-year procurement.

b. HARPOON which has an FY89 planned production rate of 138 missiles under a multi-year procurement. The additional quantities needed to bring production up to the minimum sustaining rate of 240 missiles per year are anticipated from Foreign Military Sales as in years past. We also elected not to increase production above the minimum sustaining rate pending a final decision on the Standoff Land Attack Missile (SLAM).

c. C-17A which, with an FY89 planned production of four aircraft, is being produced under Low Rate Initial Production pending a decision to go to full-rate production in the fourth quarter of FY88.

d. Army Helicopter Improvement Program (AHIP) which has an FY89 planned production of 24 aircraft. The AHIP is planned for production near the minimum sustaining rate while we examine the LHX and the total Army aviation modernization effort in the out-years.

QUESTIONS SUBMITTED BY SENATOR BYRD

Five-Year Defense Program

Question: The Department of Defense five-year funding plan assumes a two percent real funding increase in real defense in each of the outyears (FY 1990-1993). This plan, however, was prepared without the benefit of a completed, updated Five-Year Defense Program (FYDP). Is the five-year funding plan any more than a topline budget goal? Does it represent planned investment or is it merely a shell awaiting completion of the FYDP?

Answer: With the submission of the amended FY 1989 budget, we proposed an FY 1990-93 topline. This topline reflects the program reductions, terminations, deferrals, and delays made in amending the FY 1989 request to meet the budget summit agreement. It was not prepared from the completion of a new Five-Year Defense Program. This topline, however, has been provided as the internal guidance to the Military Services for the preparation of their new Five-Year programs.

Nature of Reductions

Question: Thirty percent of the research and development and procurement funding reductions ($6.3 billion of $20.7 billion) made by the Department of Defense in the President's amended defense budget request for FY 1989 were highlighted in the DoD press release on the budget as resulting from program terminations, deferrals, and delayed new starts. How would you characterize the nature of the remaining cuts in investment, representing 70 percent of the total?

Answer: The remaining reductions resulted from a variety of reasons, the largest of which was development and program delays. Other major reasons were incomplete testing, revised pricing based on actual contract awards since submission of the FY 1988/89 budget, reduced requirements, affordability of lower priority items, support associated with end items that had been reduced and impacts of congressional action on the FY 1988 budget.

Program Terminations

Question: The Department of Defense proposed the termination of 18 programs in its effort to comply with the November 1987 budget agreements. In the outyears, these terminations if approved will generate an estimated $52 billion in savings. Termination of only one program, the Midgetman missile, however, represents 77 percent of the total future savings projected. Doesn't this suggest that the "bow wave" of unfunded investment remains largely unaffected by the proposed program terminations?

Answer: A bow wave of unfunded investment would occur if the Department stretched programs to meet the budget summit targets. However, the Department avoided stretching programs in amending the FY 1988/89 Biennial budget. As a result, an investment bow wave was not created by the amended budget.

COST OF U.S. REGIONAL DEFENSE COMMITMENTS

Question: The cost of U.S. regional defense commitments are often expressed as a precentage of the total U.S. defense budget for conceptual reasons. For example, DOD has indicated that about 60 percent of the U.S. defense budget is in support of the U.S. commitment to help defend against Soviet and Warsaw Pact military forces in Europe. Please provide me with a table that makes some attempt to apportion the U.S. defense budget by region of the world, with the understanding that U.S. forces have multiple missions globally.

Answer: We do not attempt to apportion the United States defense budget by region of the world. Such an effort would not produce meaningful results since U.S. military forces must be configured to respond to military threats world-wide and, with few exceptions, cannot be considered as uniquely structured for a single region. Public Law 98-525, Defense Authorization Act, 1985, Section 1002 (d)2(A) requires that we provide a report to the Congress on our support to NATO. We regularly provide this report, which is based on a summation of resources in theater plus allocations of indirect support resources. We do not agree that such reports can be considered valid representations of our support to NATO because of our multiple mission responsibilities as pointed out above. We take the same position on all such representations of our support to regions.

Real Decline in Defense Funding

Question: The November 1987 budget agreement provided for a .7 percent real decline in defense funding. Representing the fourth consecutive annual decline in real defense funding, the defense budget request complies with the budget agreement. What are the implications of negative real growth in defense funding? What does it mean to say that the American people are asked to assume a greater degree of risk?

Answer: There is no doubt that we cannot continue to absorb real declines in defense funding without experiencing an increase in the risk to our security. The actions we are being forced to take now -- reduce force structure, defer research and development efforts or planned procurements, and delay the start of important programs -- result directly from a continuing decline in defense funding. If this trend continues, the improved capability we have achieved will be eroded and the risks will become even greater. Once again, we will have to rebuild our defense, this time at a much higher cost.

FORCE MODERNIZATION PRIORITY

QUESTION: In the Administration's FY 1989 budget proposal, funding for strategic forces increases as a percentage of total Department of Defense funding compared to FY 1988. At the same time, many defense experts believe that, given Warsaw Pact advantages in the conventional force balance, improving U.S. conventional forces is more important for deterrence than making additional improvements in strategic forces. The conventional force balance may also become more important as U.S. INF systems are eliminated. What are the Administration's priorities regarding funding for strategic and conventional forces?

ANSWER: The Department of Defense actively supports modernization of both strategic and conventional forces. As strategic forces provide the foundation for deterring both nuclear and conventional conflict, we firmly support the President in establishing strategic modernization as the number one priority. The need to modernize and provide a strong conventional force to counter our adversaries is also recognized. Without modernization of our forces we will be unable to counter the presently existing force imbalance between the Warsaw Pact and of NATO.

Force Structure Reductions

Question: In the past, the Administration has opted to slow modernization and reduce readiness funding rather than cut force structure in response to congressional budget pressures. To accommodate budget constraints in FY 1989, however, the Defense Department has proposed force structure reductions that would save about $2.5 billion in FY 1989. Some of these force structure cuts have not been popular with the Services. Why did the Administration decide this year to reduce force structure to meet its budget "mark"? What military and budgetary factors led to this decisions? What are the pros and cons of force structure reductions versus reductions in modernization and readiness funding to accommodate constrained defense budgets? What are the financial costs associated with force structure reductions?

Answer: The administration decided to reduce force structure and to terminate programs because such reductions have a continuing budget impact. Slowing modernization and reducing readiness is a short-term solution because the reduced items will need to be procured in the future. Force structure reductions and program terminations do not create this kind of bow wave. This philosophical approach reflects the Department's recognition that permanent reductions are necessary if we hope to achieve the Defense toplines projected for the future.

The other major advantage of the Department's approach to reducing the FY 1989 budget is that it results in a fully supportable force structure. When readiness is reduced and modernization is slowed, the force structure can sometimes become "hollow". It may lack the qualified people needed to meet commitments or the modern equipment necessary to defeat a more numerous adversary. The amended budget ensures that the right balance of force structure, people, readiness and modernization will exist. However, it would be less than truthful not to point out that a larger force structure with the right balance of people, readiness and modern equipment would provide a better defense posture.

The $2.5 billion figure for force reductions is a net number after the FY 1989 costs of the force reductions are taken into account. An example of these costs is the maintenance costs associated with retiring ships and aircraft.

Program Deferrals

Question: To accommodate constrained defense budgets, the Defense Department is proposing a number of program deferrals that would save over $1 billion. Many of the programs deferred will have significant budget requirements in the future, contributing to the so-called "bow wave" of investment. Assuming constrained defense budgets in the future, which may not permit any real growth in defense funding for the next five years, are these "deferred" programs affordable? If the Department of Defense cannot afford them now, will it be able to afford them several years from now if budgets do not grow? Would it be more efficient to cancel these programs outright now and use savings in other ways, for example, to sustain readiness improvements or to fund long-term research and development programs (with constant level funding) to hedge against Soviet technological breakthroughs?

Answer: The majority of programs deferred in the amended FY 1988/89 budget were deferred because of programmatic reasons such as test and development delays or slower than anticipated production in prior years. These programs were not deferred due to affordability. Assuming constrained budgets in the future, these programs will be evaluated with all other requirements and funded based on their relative merit. The fact that they were deferred in the amended budget is not an indication of low priority or unaffordability but simple recognition of fact-of-life program delays. Therefore, it would not be efficient to cancel these programs now.

INF and Improved Conventional Defense

Question: In the wake of the U.S. and USSR signing of the INF treaty, there is more focus on the need for robust conventional forces in Europe to maintain a credible deterrent. What programs does the Secretary believe are particularly crucial for bolstering NATO's conventional defenses? To what extent could cooperative development and/or production with our NATO allies reduce the costs of these programs?

Answer: I believe some examples of programs that are particularly crucial for bolstering NATO's conventional defenses are those generally included in our Conventional Initiatives package of Follow-on Forces Attack. The Competitive Strategies Task Force, as well, recognized the importance of these and other programs. To summarize, programs of particular importance generally fall into various categories such as low observables; [deleted] long range stand-off with precision delivered weapons and area denial techniques. A few specific examples would be Joint STARS, ATACMS, NATO Identification System (NIS), as well as some of our special access programs.

Both ATACMS and Joint STARS have been discussed with our allies as cooperative efforts. ATACMS was offered for co-production and, if accepted, probably would lower overall unit cost and thereby, reduce U.S. costs. For Joint STARS to date only the ground station and data links are specific cooperative items; we are considering the advisability of competing the platform for Joint STARS at some point to determine if there is allied interest in on overall cooperative effort. As in the case of ATACMS, this, too, could reduce unit costs to the U.S.

Regarding another program, the Modular Standoff Weapon (MSOW), the Department is currently completing a Standoff Weapons Master Plan and MSOW is included. This plan will be completed in the Spring.

The NATO Identification System (NIS) redresses a key deficiency in our NATO conventional force posture by providing a secure, inteoperable Interrogate Friend or Foe (IFF) capability. This program is being developed in cooperation with our NATO allies allies under the auspices of the NATO Cooperative R&D Program (Nunn Initiative).

QUESTIONS SUBMITTED BY SENATOR DECONCINI

SR-71 BUDGET AND OPERATIONS

QUESTION: The budget indicates a reduction and phase down in the operation of the SR-71 strategic reconnaissance aircraft program. When is it planned that this program will be completely phased out? Isn't this the only survivable strategic reconnaissance aircraft in the Air Force inventory? As we move toward implementation of arms control agreement with the Soviet Union, it would appear that verification requirements would dictate an increase in our strategic reconnaissance capability rather than a decrease. Would you comment on the Administration alternatives to accommodate these increased requirements? Can you tell me if the SR-71 aircraft is being used in the current Persian Gulf situation and if the fiscal year 1989 reduction will alter the reconnaissance capability in this area? What are the specific actions taken in fiscal year 1989 to reduce the program by $119 million and 527 personnel?

ANSWER: [Deleted] [deleted].

Though it is the only survivable penetrating strategic reconnaissance aircraft in the Air Force inventory, the costs of upgrading to maintain this survivability, and to continue daily operations is proving to be overwhelming under the present fiscal conditions. [Deleted.]

This amounts to a total reduction of $115M and 527 personnel.

Defense Growth

Question. While the defense budget for fiscal year 1989 is a no real growth budget, the Defense Department is projecting annual growth of 2.2 to 2.4 percent from FY 1990 through FY 1993. Wouldn't this mean, during a time of increasingly stringent Gramm-Rudman-Hollings deficit targets, that defense would not contribute to deficit reductions at all, and that it would actually add to the reductions necessary in non-defense programs?

Answer. The defense budget is based on national security requirements. As you know, the deficit is a function of total federal spending and revenues. Defense does not cause the deficit. From 1981 to 1985, as the deficit increased, non-defense spending growth consistently exceeded defense spending growth. Between FY 1982 and FY 1987, defense budget authority was reduced by $125 billion compared to the President's request. At the same time, nondefense budget authority increased by more than $250 billion. The reality is that defense spending alone has not caused the federal deficit nor will gutting the defense budget solve the deficit.

Question. Is it realistic to project 2.1 to 2.4 real growth per year in defense funding for the out years? In an address to the American Defense Preparedness Association on January 19 of this year, Mr. Helm stated that the Defense Department's prospects of receiving two percent real growth per year in its our year budgets was wildly optimistic," and that 'we're probably looking at five or more years of real decline." Why then, is DoD projecting this real growth in its budgets? Isn't it important for planning purposes to use realistic projections of future funding?

Answer. The distinction here is between the amount of real growth in defense spending that will provide the minimum acceptable risk and the amount of real growth that would be more acceptable in terms of overall spending. Although there is some congressional support for a real freeze or further decline in defense budgets in light of continued budget deficits, the defense budget for FY 1989 and the 2 percent real growth in the Topline proposed for the outyears have been favorably received by many in the Congress. After 4 years of real decline in the defense budget, a modest 2 percent real increase in defense for the next several years is absolutely essential for our national security.

Outyear Program

Question: The Defense Department is projecting three to five percent annual real growth in procurement funding in the outyears. What will happen to production programs if this growth is not forthcoming. Would you cancel programs to get the savings, or "stretch out" production programs? Is there any room for production programs to be stretched out while maintaining ecomonic efficiency given current projections of future production rates?

Answer: Our emphasis in amending the FY 1989 program was to terminate programs and to reduce force structure rather than to produce programs uneconomically or to degrade readiness and support. It is more important to have a smaller, fully supportable force than to present a larger but "hollow" force. The same philosophy will be applied in reducing the outyear programs.

Composition of Reductions

Question: The amended FY 1989 defense budget request cuts approximately $14.6 billion from the original request submitted last year for procurement funding. DoD's February 18 news release attributes only $4.8 billion in reductions to program cancellations, some of which is in the research and development accounts. What accounts for the rest of the reductions in the procurement accounts? Arean't there some stretchouts in the FY 1989 budget (F-15, Bradley, Harrier)? Were ammunition and spare parts cut? Is sustainability being sacrificed so the DoD can avoid canceiling more major weapons programs?

Answer: The $14.6 billion reduction to the procurement title is composed of the following adjustments:

FY 1989 DoD Procurement Changes

($ in Billions)

Terminations	-2.0
Deferrals	-.4
New Starts	-.3
Aircraft	.1
Missiles	-3.4
Ships	-2.7
Spares	-.8
Comm & Electronics	-2.0
Ammunition	-.5
Tracked Vehicles	-.3
Space Programs	-.3
Defense Agencies	-.4
Other	-1.4
Total	-14.6

In meeting the budget summit targets some very hard decisions were made but the Department attempted to avoid procurement stretchouts unless there was a programmatic reasons for delaying procurement. One exception was the F-15 but a truly economic FY 1989 procurement rate for this system is much higher than either the 42 in last year's submit or the 36 in the amended budget. The Harrier is not a stretchout but a force level change because the total procurement requirement is being reduced. In the case of the Bradley, the quantity is less than projected last year, but the total funding is the same in order incorporate survivability improvements. As shown above some reductions to spare parts and ammunition were taken but we believe that this amended budget still provides the best possible balance of modernization and sustainability.

FY 1989 Reductions

Question: The amended FY 1989 defense budget request cuts a total of $9 billion from the original request for operations and maintenance and military personnel funding. Of this amount, cuts in force structure would save approximately $2.5 billion, according to data in DoD's February 18 news release. What accounts for the other $6.5 billion in reductions from the O&M and military personnel accounts? Would these cuts have a detrimental effect on readiness?

Answer: Congressional approval of the 2% in lieu of the budgeted 4% military pay raise in FY 1988 reduced military personnel requirements by roughly $1.4 billion in FY 1989. Reductions in military personnel end strengths reduced requirements by $1.6 billion. The lower pay rate has widened the military pay comparability gap to 11 percent. While recruiting and retention have not been seriously damaged, gains are eroding in reenlistments. If pay caps continue, as they have since FY 1983, it is inevitable that DoD will not be able to attract and keep high quality people. This could have a detrimental effect on readiness.

To accommodate the substantial reduction in operation and maintenance funding in FY 1989, the Services have deferred budgeted real property maintenance projects and have reduced base level services at DoD installations substantially below the level included in the FY 1988/FY 1989 President's budget request. In light of these reductions, the backlog of maintenance and repair will further increase, civilian personnel will be cut back and some military personnel may be diverted from training to base support functions.

The Military Departments have also eliminated planned growth in medical support and have cut back funding in such areas as logistic support, training and education, communications, automated data processing, and personnel support equipment. The application of new medical technologies will be restricted and supply operations will be curtailed.

The O&M reductions addressed above were made to minimize reductions in higher priority readiness and sustainability programs such as operational training and depot maintenance. The decreases to such programs as real property maintenance and logistics support cannot be sustained over the long term without degrading readiness. Accordingly, the Department will continue to review its O&M requirements in future years and will reprioritize Defense resources as necessary to protect readiness programs and to minimize the risks to our Defense posture.

AH-64 Procurement

Question: There is approximately $809 million for procurement of 72 AH-64 Apache helicopters in the budget request. How much are you estimating each helicopter to cost? Would multiyear be a more efficient way to produce these helicopters in the future?

Answer: The unit flyaway cost for the 72 AH-64 helicopters in the FY 1989 request is $9,896 million. The procurement will be an annual lot of airframes, engine and other equipment. Multiyear procurement would be a more efficient means of procurement for this program, and we will examine such a procurement plan.

QUESTION: In his Annual Report to Congress, Secretary Carlucci states that the INF treaty "is militariy advantageous to us," but that it increases the need for certain "force adjustments," including deployment of more nuclear artillery, the Army Tactical Missile System with a nuclear warhead, upgrades of nuclear bombs, possibly including a new Tactical Air-to-Surface Missile, and the continued production and deployment of a nuclear version of the need for all of these weapons? [sic] When we deployed the PERSHING II missiles and the GLCMs in Europe, it was to counter the threat posed by Soviet SS-20s. Since INF treaty will remove this threat, how can it be that the need for more nuclear weapons in Europe is increasing? Also, how much will these upgrades cost?

ANSWER: The programs listed in your question are not "force adjustments." Rather, they are programs necessary to satisfy requirements that were identified previous to and independent of the INF Treaty. These programs do not, as the question implies, involve increased numbers of nuclear weapons. Rather, they would lead to the replacement of existing, older weapons within the reduced European level of NATO warheads agreed in NATO's 1983 Montebello Decision. Indeed, the reduction by 1,400 warheads agreed as part of the Montebello Decision was predicated on the modernization of remaining systems.

The INF Treaty is in the interests of the United States and NATO, but it must be complemented by certain force adjustments. This is a natural consequence of the need for NATO force planning to support the Alliance strategy of Flexible Response, taking into account available systems.

The force adjustments under consideration by the Alliance would involve systems that already exist or are already planned. They would not result in the development or deployment of new weapon systems that had not already been envisioned as a result of the Montebello Decision. The force adjustments would not undercut the reductions in nuclear weapons that have already resulted from the Montebello Decision or the further reductions that will result from the INF Treaty.

The cost associated with the force adjustments cannot be determined, because no decisions have yet been taken on them. In many cases, the cost would be minimal.

IMPLICATION OF A START TREATY ON DEFENSE PROGRAMS

QUESTION: Will the START treaty, as currently envisioned, save any money? How would it affect current strategic modernization programs.? Is any effort being made in the negotiations to limit not only the number of weapons in each side's arsenal, but also to limit modernization so as to prevent the deployment of more destabilizing weapons, and to save money?

ANSWER: The objective of arms control is not to save money, nor is it to limit modernization; it is to bring stability to the strategic balance. Our objective in START is to seek significant reductions in strategic nuclear warheads. In fact, it is doubtful that the U.S. could achieve any near - or mid-term net savings, since U.S. force modernization is an essential element to stability in a reduced warhead environment. For example, I can foresee no changes in our requirements of the Peacekeeper missile, the B-2 strategic bomber and the Trident SSBN and its Trident II missile. In the long-term, with reduced force sizes, the cost of replacement and operations should be lower, thus lowering the costs associated with deterring international aggression.

START Treaty

QUESTION: Will the START Treaty, as currently envisioned, save any money? Is any effort being made in the negotiations to limit not only the number of weapons in each side's arsenal, but also to limit modernization so as to prevent the deployment of more destabilizing weapons, and to save money?

ANSWER:

The purpose of arms control is to increase our national security and that of our allies. In early arms control reductions monetary savings was posited as one of the benefits of arms control. We have not seen that result from past arms control agreements. This is not our rationale for our current arms reduction negotiations. If we are in arms reduction negotiations simply as a cost-cutting effort, we are in the negotiations for the wrong reason. If the START Treaty does save any money, it will probably not be a great deal. Some operations and maintenance monies may be saved, but there will be costs associated with verification that will have to be taken into account.

The United States has proposed restricting the modernization of the most destabilizing strategic weapons. However, as noted above, the purpose of this, as well as the purpose of the Treaty itself, is to enhance the national security of the United States and its allies. Provisions are not developed with the objective of saving money.

QUESTIONS SUBMITTED BY SENATOR STEVENS

RELOCATION/DEACTIVATION OF F-16 UNITS

QUESTION: Based on recent negotiations with Spain, it is now evident that the Air Force F-16's at Torrejon will be moved within the next year. The Air Force has indicated that the F-16 unit may be moved to another European site, and if that happens, a unit in the continental U.S. will be proposed for deactivation. Is this true? Given the alternative of deactivating the Torrejon unit or another U.S. based unit, why would the Department prefer to set up a new unit in Europe? Which unit in the U.S. is most likely for deactivation, and why is it considered of lesser necessity than a new site in Europe? Pursuit of this kind of strategy is sure to raise the "European burden sharing" arguments. It appears that the Air Force is anxious for Congress to overrule this alternative, particularly in light of the fragile support that exists here for NATO. Do you agree with the Air Force position in this issue?

ANSWER: In a joint statement issued by the Government of the US and the Government of Spain in December 1987, the US has agreed to withdraw the 401 Tactical Fighter Wing from Torrejon AB not later than May 1991. NATO deliberations are currently underway to relocate the 401st in the European southern region. Included in these deliberations is the question of adequate NATO funding to comply with Congressional prohibition against use of any US funds for such a relocation. US military strategy and commitment to the NATO alliance require our efforts to maintain an adequate level of forward deployed forces. If NATO satisfactorily meets US requirements for relocation of the 401st, discussion of alternative force reduction would begin. These discussions would consider both CONUS and other overseas units.

SHIP MODERNIZATION AND FRIGATE RETIREMENT

QUESTION: Did DoD consider recent and current ship modernization and overhaul investments in selecting ships for retirement.

ANSWER: Yes, maintenance and modernization status was considered. The overriding consideration was, however, warfighting capability and the maintenance of battle group capable AAW capability. Due to the age and general capabilities of the FF 1040/FFG 1 classes, modernization has been limited to critical safety and communications interoperability.

QUESTION: What FY 1988 funds were planned to be spent to modernize or overhaul frigates now scheduled to be de-commissioned?

ANSWER: There is one FF 1040 and one FFG 1 currently in FY 1988 availabilities. A total of 15.6M is programmed for these availabilities. The Navy has not identified a hull specific decommissioning schedule as yet.

QUESTION: What efforts are under way to recover or stop modernization activities for the frigates to be de-commissioned?

ANSWER: All modernization programmed for ships not yet under contract has been deleted. For those ships currently in availabilities contractual requirements must be considered in determining the ability to recover programmed costs.

QUESTION: Given the on-going work on these vessels, how firm are you on retiring these ships?

ANSWER: Fiscal requirements drove the decision to decommission these ships. This option was chosen as having the least overall impact for the return gained.

QUESTION: What other older vessels were considered for retirement by the Navy in FY 1989?

ANSWER: The DDG 2 and DDG 37 ship classes were also considered. They were not chosen because of the requirement to maintain battle group AAW capability until the DDG 51 class destroyers are delivered.

IMPACT OF PERSONNEL FREEZE ON RESERVE COMPONENTS

Question: Given the expanded role of the reserve component in the "TOTAL FORCE" military structure, what will be the impact of freezing personnel for the National Guard and the Reserves?

Answer: The Reserve components have assumed greater responsibilities for increasingly complex missions as their respective authorized strengths have increased. A leveling of personnel strength will restrict the ability of Reserve components generally to accept additional or expanded missions. The original FY 1988/89 budget request sought a total of 40,500 additional personnel for the Reserve components.

Since 1980, the total strength of the Selected Reserve has increased by 322,000 or 38 percent. A one year pause in this growth will not significantly degrade the capability of any Reserve component. We cannot, however, freeze the strength levels over a longer period of time and at the same time assign new and expanding missions to the National Guard and Reserves.

A temporary freeze in personnel will limit the Army Reserve components in two ways. Since the majority of the Army's Combat Support and Combat Support units are in the Army Reserve, a freeze will slow previously planned improvements in those units. A freeze will also prevent the Army National Guard from activating new combat units and increasing the manning of present combat units.

A freeze will further prevent planned growth within the Naval Reserve which was intended to increase the percent of unit manning. Previously planned growth in the Air Force Reserve to support additional force structure and modernization and to improve readiness and sustainability will not take place. The freeze will also delay planned growth by the Air National Guard in medical and communications areas.

EFFECT OF FTS FREEZES ON NEW NATIONAL GUARD MISSION

Question: How will the Army and Air National Guard meet commitments to establish new units for new mission requirements lacking additional full-time personnel?

Answer: The full-time manning requirements for new units and new mission requirements could be met by decreasing the full-time manning in existing Guard units. However, since full-time staffing is a recognized determinant of combat readiness, the resulting reduction of full-time support in both new and existing units would retard our progress in improving the readiness of Reserve component units.

QUESTIONS SUBMITTED BY SENATOR MCCLURE

New Production Capability Funding

Question: The status of the nation's nuclear material production facilities is a matter of great concern to me. The National Academy of Sciences' report on the Department of Energy's defense reactors made it quite clear that the aging facilities may not be able to continue to produce material until a new production reactor is completed. If this occurs, we lose the capability to produce tritium, a loss that could easily imperil our ability to negotiate arms control agreements from a position of strength.

a. How large a role is the Department of Defense prepared to play in funding of new production capability?

b. Will the Department of Defense, specifically the Nuclear Weapons Council, participate in the acquisition strategy for new production capability?

Answer:

a. The Department of Defense is working with the OMB and the DOE to ensure adequate new production reactor funding is requested.

b. Yes. The Secretary has directed the Nuclear Weapons Council to review certain aspects of DoD and DOE budgeting to develop a common approach to outyear needs, including new production reactor. Our goal is to accomplish the review as part of the study to determine the overall size and productive capacity for a modernized nuclear weapons complex. PL 100-80 directs the President to submit the study results to Congress by December 15, 1988.

Two Reactor Strategy

Question: As you know, the FY '88 Energy and Water Appropriations Bill and the FY '88 Defense Authorization Bill contain language that directs DOE, in preparation of its NPR acquisition strategy, to consider a two-reactor strategy, at two different sites, and possibly using two different technologies. As the author of these amendments, I wish to make it clear, that two reactors may not mean twice the capacity, or cost. Rather it implies construction of smaller, modularized units. Modular construction lends itself to a number of advantages over a larger capacity unit: It allows construction to be tailored to keep pace with material needs, budgetary constraints, phase-out of the Savannah River reactors and other matters. It allows phased construction at two sites, which address the national security implications of having all our eggs in one basket.

a. Has DoD looked at this possibility? Is the department willing to look at this option, especially if it were to mean only a slight increase in cost?

Answer:

a. The Department of Defense has not looked in any detail at the two-reactor, two-technology approach to satisfying the new production reactor requirement. The DoD has been briefed that the DOE has formed two panels, one to look at technologies and, one to look at sites. The DOE member of the Nuclear Weapons Council (NWC) has stated DOE will brief the Council as soon as the two panels report. The Secretary has directed the NWC to develop a common approach to outyear needs. The Council will work with OMB and the Congress to ensure an adequate supply of tritium and plutonium is available to meet national security needs.

POSEIDON SSBN RETIREMENT/CONVERSION

In the budget submission, the Navy announced its intention to retire a Poseidon SSBN several years ahead of schedule. This follows last year's Congressional decision to retire the USS Andrew Jackson for arms control-related reasons.

Question: Does the decision to retire an SSBN in FY89 reflect budgetary considerations, arms control considerations, or a combination of both? If both, which consideration was foremost?

Answer: The decision to retire USS JOHN ADAMS (SSBN 620) rather than overhaul the ship in FY89 reflects budgetary considerations and not arms control considerations.

Question: If arms control considerations were indeed a factor, is it necessary to retire the submarine in question? Are there options to convert the submarine for other, non-strategic, missions, such as special operations or training? Were these options considered? Will the Navy and the Defense Department consider converting the submarine in question for non-strategic missions, thereby getting several more years of use out of a vessel which represents a sizeable investment of the taxpayers' money?

Answer: The Navy and Department of Defense have considered various options for converting SSBNs to non-strategic seagoing missions when removed from strategic service. The results of an extensive study of these options were reported by the Secretary of Defense to Congress in May 1986. It is not cost effective to convert SSBNs to non-strategic missions. A very limited useful service life (4-5 years) would remain upon completion of the modifications. Conversion costs will be in the order of $170M and would require 2-3 years. The one exception to this is conversion to a Moored Training Ship for the training of nuclear fleet operators. USS SAM RAYBURN is currently undergoing such conversion. Since this ship will not be seagoing the normal technical considerations associated with the service life of a submarine do not apply. USS JOHN ADAMS is not a candidate for Moored Training Ship conversion.

Questions Submitted by Senator D'Amato

Drug Trafficking

Question: Do you believe the Department of Defense can and should be doing more to help stop the flood of illegal drugs entering the United States?

Answer: No. Stopping drug abuse in America is the number one domestic policy of this Administration. Eliminating the demand for drugs at home is the key to stemming the flow of drugs from abroad. Efforts to eradicate drugs at their source and to interdict their shipment are, at best, only important holding actions. The Department of Defense is involved in the crusade against illicit drugs to the fullest extent permitted by law, and currently provides significant support to drug law enforcement agencies. That support includes: the loan of equipment ($303.5M provided in FY87); intelligence sharing; assignment of personnel; secure communications support; surveillance and maritime support as a by-product of military operations and training; and staff planning. Employment of the military in drug interdiction, outside its appropriate support role or in lieu of legitimate law enforcement agencies, would be no more effective, would seriously degrade our military readiness to defend against armed aggression, would violate Federal laws, and would probably be viewed as an act of war if conducted unilaterally.

Creation of ASD for Drug Support

Question: Would you support the creation of an Assistant Secretary of Defense position to oversee the coordination of DoD's enforcement and interdiction support effort?

Answer: No, because the Secretary of Defense has already taken action to that effect when on October 9, 1986, he designated the Assistant Secreatry of Defense (Force Management and Personnel) as the DoD focal point for monitoring and coordinating all DoD activities in implementation of the President's six goals to eradicate drug abuse. ASD(FM&P) is assisted in these expanded duties by the Deputy Assistant Secretary for Drug Policy and Enforcement, a new Deputate established by the Secretary of Defense on 5 January 1987.

Assistant Secretary of Defense for Special Operations and Low Intensity Conflict

QUESTION: Congress created, over the Department's active opposition, the position of Assistant Secretary of Defense for Special Operations and Low Intensity Conflict. This position remains vacant to this day. Reportedly, someone has now been selected to fill it, but the person is still in the Presidential personnel process. Has the Department's attitude toward this position changed?

ANSWER: As you know, the President submitted a nomination for the position of Assistant Secretary of Defense for Special Operations and Low Intensity Conflict in June 1987 and no congressional confirmation hearings were held until December. Following the relatively recent withdrawal of this nominee from further consideration, the President began reviewing the qualifications of another candidate and will await results of the candidate's background investigation before submitting his name for official consideration. Despite the lengthy nomination process, the Department remains committed to complying with the spirit and intent of the law.

QUESTION: When do you expect to fill the Deputy Assistant Secretary positions in that organization?

ANSWER: There have been three Deputy Assistant Secretary positions created to fall under the Assistant Secretary of Defense for Special Operations and Low Intensity Conflict. The Deputy Assistant Secretary for Resources position was filled on 1 March 1988. The Deputy Assistant Secretary for Special Operations is expected to arrive about 1 April 1988. The position for Deputy Assistant Secretary for Low Intensity Conflict is still vacant, but a nominee is expected in the near future.

QUESTION: Can you explain the Department's program priorities in the Special Operations area?

ANSWER: The Department's program priorities are based on Special Operations requirements established by the CINCs in response to threats posed in every theater. Emphasis is placed on specialized training, technical proficiency, development of individual skills, mobility, readiness, and the proper amount of Special Operations-peculiar equipment to enhance mission survivability and success. These priorities are outlined in the Services' SOF Master Plans, contained in the SOF Congressional Justification Book, and are detailed in the Secretary of Defense's Defense Guidance .

QUESTION: (U) This will be the fourth fiscal year in which U.S. defense spending has declined in real terms. What has happened to the Soviet military budget during this period?

ANSWER: [Deleted.]

FOLLOWUP: (U) We are cutting both force structure and programs in this year's budget. What have the Soviets been doing with their force structure and programs during the past four years?

ANSWER: [Deleted.]

Question:

You said that we have to accept increased risks to our security because of these cuts. Can you be more specific?

Answer:

The peacetime military strategy of the U.S. is designed to deter war, prevent Soviet domination of the Eurasian landmass, to expand U.S. influence among less developed countries, and to facilitate projection of military power abroad in defense of U.S. interests, wherever and whenever they may be threatened. Should deterrence fail, the U.S. will endeavor to achieve national objectives swiftly without resorting to the use of nuclear weapons.

The fundamental objective of U.S. strategic policy is to deter direct attack--particularly nuclear attack--on the United States and its allies by ensuring that any adversary would perceive that it could not achieve its war aims and, should it initiate an attack, would suffer losses that were unacceptable.

Today, the strategic forces of the United States are capable of achieving this objective. The Soviets are expected to expand and to improve offensive and defensive strategic force capabilities through 1994. The U.S. must, therefore, continue its strategic modernization program to be in a position to overcome increasingly robust defenses and be able to successfully attack harder and more mobile Soviet targets.

In a conventional conflict the Soviet Union and the Warsaw Pact would enjoy a significant military advantage in central Europe over the U.S. and its allies, because the Warsaw Pact maintains a significant numerical advantage in manpower and weapons systems. As a result, questions arise concerning current capabilities to execute Alliance or U.S. national military strategy with reasonable assurance of success. The Joint Chiefs of Staff have consistently contended that the degree of risk is high.

The Joint Chiefs of Staff 1987 Military Net Assessment concludes that U.S. forces are currently capable of deterring war. However, if the capability of those forces is reduced because of budget cuts then the capability to deter war is likewise reduced and the risk to our security is increased.

Question:

What will happen, in your opinion, if the 2% real growth rate you project for defense spending beginning in fiscal year 1990 does not materialize?

Answer:

Great progress has been made over the past seven years in improving the capabilities of U.S. forces -- in readiness, modernization, and sustainability.

Unfortunately, the Soviets have continued to improve their forces both in quantity and especially in quality. As a matter of fact, the USSR over the last two decades has built the world's largest military force -- both nuclear and conventional -- which is supported by a huge arms production base and a steady R&D program.

Because of fundamental philosophy and strategy, it is not likely that the Soviet military force development effort will diminish in the future, nor is it likely that the Soviets will curtail their defense spending. The United States, therefore, must continue consistently to improve the readiness and capability of its forces, not just for one or three years, but into the future: in US-Soviet military competition, we must be prepared for a marathon, not just a sprint.

The improved capability of U.S. forces over the past seven years has increased the ability of U.S. forces to deter war. If the improvement of U.S. forces does not continue because of reduced defense spending, the Soviets will achieve even greater advantages. The risk will therefore increase of the U.S. not being able to deter war.

Aircraft Industrial Base

QUESTION: Major aircraft procurement decisions were made last year. These decisions may materially reduce the number of prime contractors available to build new tactical aircraft in the 21st Century. Did you take into account the shrinkage of our defense industrial base when you made these decisions?

ANSWER: Decisions on major aircraft procurements involve many complex issues including maintaining sufficient prime contractors, as well as subtier contractors. All of our contracts involve vigorous competition. This is healthy both for the economy and for DoD, in that it brings about efficiencies in the weapon system process. It is true that as weapon systems become more complex and more costly and that we buy fewer systems, our capacity to build weapon systems has been shrinking since World War II. Maintaining the base at its earlier levels would cause inefficiencies.

SUBCOMMITTEE RECESS

Chairman STENNIS. The subcommittee will now be in recess subject to the call of the Chair.

[Whereupon, at 12:19 p.m., Thursday, March 3, the subcommittee was recessed, to reconvene at the call of the Chair.]

DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1989

TUESDAY, MARCH 22, 1988

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10:01 a.m. in room 192, Dirksen Senate Office Building, Hon. J. Bennett Johnston presiding.

Present: Senators Johnston, DeConcini, Stevens, Kasten, D'Amato and Cochran.

DEPARTMENT OF DEFENSE

DEPARTMENT OF THE NAVY

U.S. MARINE CORPS

STATEMENT OF HON. H. LAWRENCE GARRETT III, UNDER SECRETARY OF THE NAVY

OVERVIEW OF NAVY BUDGET REQUEST

OPENING STATEMENT OF SENATOR JOHNSTON

Senator JOHNSTON. Good morning. The subject of the hearing today is the fiscal year 1989 amended budget for the Navy and Marine Corps. The request before this subcommittee is for $94.2 billion. This covers all but military construction programs for the Navy.

The funding request is nearly $12 billion below the amount projected last year. While all the service budgets have been reduced from the amounts projected last year in order to comply with the budget summit agreement, the reductions to the Navy are particularly large. In fact, they are the largest. The Navy is, in fact, the only military department with a request below the amount provided for in fiscal year 1988.

PROCUREMENT PROGRAM REDUCTIONS

The largest dollar reductions are for procurement programs. Shipbuilding has fallen by more than $7 billion from the amount appropriated last year primarily because Congress fully funded $6.3 billion for two new aircraft carriers. After accounting for the carriers, the request is still $1.9 billion below the level projected last year.

The change reduces Aegis ship production from the five funded during each of the past 2 years to just three ships.

Reductions made in operations and personnel funding have forced a goal of a 600-ship Navy to be delayed until the 1990s, as 16 additional ships will be retired to reduce operating and personnel costs.

Similarly, the activation of a 14-carrier air wing has been deleted, and fleet modernization efforts for both aircraft and ships will be deferred to stay within the reduced funding level.

The largest reductions have forced many other difficult choices, such as cancelling the A–6F aircraft and the Navy remote ocean sensing system. The Marine M–1 tank procurement has been scaled back, and Navy plans for the V–22 have been changed.

Members of this subcommittee may not agree with all of the recommendations, but the decisions that have been made have clearly been very difficult. We will need candid assessments on these matters to help us decide whether Congress should adjust this request.

INTRODUCTION OF WITNESSES

To help in our deliberations, I am pleased to welcome the Under Secretary of the Navy, the Honorable H. Lawrence Garrett, III, accompanied by Admiral Carlisle Trost, the Chief of Naval Operations, and General A.M. Gray, the Commandant of the Marine Corps.

Gentlemen, we look forward to hearing your views on these and other matters.

Mr. Secretary, we will begin with your statement.

Mr. GARRETT. Thank you, Mr. Chairman.

I welcome this opportunity to discuss with you the Department of the Navy budget for Fiscal Year 1989.

STATUS OF NAVY AND MARINE CORPS

I am pleased to report that your Navy and Marine Corps continue to be fully capable of operating globally to protect the interests of the United States. Indeed, the sustained commitment to rebuilding our naval forces during the past 7 years has clearly reversed the previous decade of neglect.

STRENGTHENING OF U.S. NAVAL FORCES

However, we are now challenged by the need to maintain and strengthen our naval forces in the face of severe fiscal constraints. Regrettably, there is absolutely no indication that the Soviet naval forces will be any smaller, less sophisticated, or less prepared for war.

Arrayed against our Navy is an increasingly sophisticated and capable Soviet Navy along with an increasingly lethal high technology threat from non-Soviet adversaries. These threats and the concomitant risk to full execution of the national strategy require our steadfast commitment to maritime power.

The Navy and Marine Corps that we have been rebuilding since 1981 are forces that close the gap between national commitments and military means. This administration's resolve, reiterated by the President during his most recent press conference, to build a fully-supported balanced fleet of 600 ships recognizes the minimum force required to attain our national objectives. That resolve remains firm.

The sea-based combat power that our force commanders require is centered on 15 carrier battle groups, four battleship battle groups, 100 attack submarines, adequate numbers of ballistic missile submarines, and sealift to support an assault echelon of a Marine expeditionary force and a Marine expeditionary brigade.

The resulting Navy and Marine Corps are affordable and deserve public and congressional support.

As you noted, our amended fiscal year 1989 budget is $12.3 billion lower than the budget program reflected for fiscal year 1989 in the biennial budget submission. In order to comply with the bipartisan budget summit agreement, we have had to make reductions across the spectrum for our programs.

That does not alter the fact that balanced and capable naval forces remain the underpinning of our national strategy of deterrence.

Your continued support of our naval forces is essential in insuring that the risk to our policy of deterrence does not become an unacceptable one.

EFFECT OF PROGRAM REDUCTIONS

The required program reductions have necessarily affected readiness, sustainability, modernization and force structure. However, we have worked hard to insure that our program reductions are balanced, however delicately, and that we have not introduced an unacceptable level of risk in any warfare area or major program category.

At the reduced funding level for fiscal year 1989, our programs simply will not bear a significant redesign without jeopardizing that delicate balance.

We have reduced our program force structure in order to achieve the reduced budget spending levels. Rather than overhauling POSEIDON missile submarines to maintain them in our active force, they will be decommissioned as TRIDENT submarines come on line.

Our 14th carrier air wing, as you noted, will stand down until the 1990s. 16 frigates will be retired, eight in 1988 and eight in 1989.

READINESS AND SUSTAINABILITY

We have continued to maintain our emphasis on readiness and sustainability of our remaining forces. Critical readiness and training activities are programmed to meet the day-to-day demands of deterrence in continued sea operations and to meet the needs of the Unified and Specified Commanders.

In view of Persian Gulf operations and other commitments, funding for OPTEMPO and flying hours will be maintained at the fiscal year 1988 level. Other readiness lines are funded as completely as possible, supporting our commanders' need for mission-capable forces today.

PROCUREMENT

The procurement of our budget has declined from 35.1 percent in the President's original fiscal year 1988–1989 budget to 31.4 percent in the fiscal year 1989 amended budget. This results in part from the emphasis that we placed on avoiding, to the extent possible, reductions to our operations and maintenance programs.

This is the smallest share for procurement in the past 13 years. It reflects reduced orders for a broad range of missiles, ammunition and other expendables at the same time that we have reduced procurement of modernization items.

While progress toward ordnance inventory objectives will necessarily be slower, we have continued to emphasize long-term program executability and relative contribution to the CINCs' ability to fight in making these very difficult decisions.

We have also been careful to maintain quantities necessary to support competitive procurement wherever appropriate.

Our sustainability programs, however, now enjoy a larger share of our procurement appropriations than they did before. Some delays in modernization of ships and aircraft were unavoidable, given the size of the required reductions.

Looking to the future, we have programmed only those transitional initiatives that will be key to our fundamental warfighting capability in the 21st Century.

ANTISUBMARINE WARFARE

Antisubmarine warfare remains our highest priority. In view of Soviet gains in submarine warfare, we are pressing ahead with a broad range of ASW modernization efforts led by the acquisition of the SSN–21 attack submarine. Acquisition programs are focused on systems and technologies that enhance our advantages over the Soviets. This competitive strategy approach makes the maximum advantage of our technological strengths.

As you will see in the details of our budget submission, we chose vertical cuts where possible over unrealistic and uneconomical program stretches. We terminated several ongoing programs and cancelled several new program starts.

Fiscal and management initiatives will reduce acquisition costs to the maximum extent possible and thereby mitigate the impact of the $12.3 billion reduction.

Mr. Chairman, despite our best efforts, we recognize that certain negative consequences of fiscal retrenchment are plain. Some unit costs will go up. Competition, with its attendant savings and expanded mobilization base, will be more difficult to maintain. The industrial base will suffer with less capacity for the surge required for major conflict.

These trends reduce directly the deterrent value of America's defenses. Therefore, we must work hard to promote a public consensus for a more stable and durable approach to national security budgeting.

Further details regarding our budget program requests, which reflect many difficult decisions, are presented in my statement for the record and in the posture statements of the Chief of Naval Operations and the Commandant of the Marine Corps, which will be inserted in the record.

PEOPLE PROGRAMS

I would like now to address briefly an issue of importance that affects all of our people and programs in the sea services.

Mr. Chairman, our sailors and marines are, without question, our greatest asset. While we accept the need to meet our commitments with fewer personnel than we actually require, it is essential that we provide adequately for those who do serve our Nation in the sea services throughout the world.

People programs, including quality of life issues such as family housing and medical care were funded to attract and retain the sailor and the marine in the next century. Pay caps since fiscal year 1983 have resulted in a disparity between military pay and private sector wage growth of about 11 percent, as measured by the employment cost index.

I join the uniformed and civilian leaders of all of the military departments in supporting the Department of Defense request for a 4.3 percent pay raise for our sailors and our marines.

CONCLUDING REMARKS

In conclusion, Mr. Chairman, as the Secretary of Defense has noted, the amended Fiscal Year 1989 defense budget before the Congress reflects significant force structure reductions that have long-term implications for our national security. The price we paid in the early 1980s to reverse a tragic decline in the condition of our military forces was indeed high.

I share the Secretary's fear that with 4 years of real decline in defense already a fact, we risk entry into another era of neglect.

Even in this fiscally constrained environment, we must never lose sight of the commitments we ask of Americans in uniform nor of the threat they face in going in harm's way on our behalf. We must equip, train, and support them to insure that they remain as they are today, ready to meet those commitments and deter or defeat aggression.

In fairness to them and in light of our sacred obligation to preserve and defend our Nation's security, we can do no less.

Mr. Chairman, I am confident with the support of the Congress and the support of the American people, together with the dedicated professionalism of the men and women of the sea services, the Navy and Marine Corps team will continue to serve this nation well and faithfully.

Thank you very much, sir.

[The prepared statement of H. Lawrence Garrett follows:]

A REPORT BY
THE HONORABLE H. LAWRENCE GARRETT, III
UNDER SECRETARY OF THE NAVY

ON THE
POSTURE AND FISCAL YEAR 1989 BUDGET
OF THE
UNITED STATES NAVY AND MARINE CORPS

Mr. Chairman, members of the committee, I welcome this opportunity to offer my assessment of the current posture of the Navy-Marine Corps team and to discuss the Navy budget for Fiscal Year 1989.

Last year we celebrated the 200th anniversary of the framing of the Constitution. I am reporting to you that Congress, under Article I of the Constitution, has provided and maintained a Navy that is capable of operating globally to protect the interests of the United States. Naval forces are meeting their commitments with the best equipment and personnel in the world. Preparing our Navy and Marine Corps for action throughout the full spectrum of potential conflict, from peacetime presence to global war, has yielded a powerful mix of weapons, centering on the carrier battle group and amphibious power projection forces.

The success of operations in the Persian Gulf demonstrates our naval forces' ability to operate continuously at the cutting edge of national security policy at any level of conflict. Indeed, for our Navy and Marine Corps, a "decade of neglect" has been reversed. But, just as a nation must use care in expending borrowed resources, so must we consider the extent that we will draw down this reservoir of manpower and equipment as we meet our operational commitments under a contracting budget. Visits to the fleet reveal how close to the edge we are operating in terms of wearing out our people and equipment. I have every confidence that the committee will continue to recognize that defense is the first and most vital function of national government and will acknowledge the abiding requirement to maintain sea services ready to meet any national tasking.

As the Secretary of Defense noted in his statement before the Senate Armed Services Committee last month, the amended FY 1989 defense budget before the Congress reflects significant force structure reductions that have long term implications for our national security. The price we paid in the early 1980s to reverse a decline in the condition of our military forces was high. I share the Secretary's fear that, with four years of real decline in defense already a fact, we are halfway into another decade of neglect. The FY 1989 Department of the Navy budget distributes decrements in ways that maintain a balance among programs, while conforming to the constraints of the budget summit agreement. It merits immediate Congressional support.

I. PLANNING THE FUTURE OF THE NAVY AND MARINE CORPS

Changing Environment: Changing Threat

We see today a broad shift in the world balance of power, as concentrations of economic strength and technological talent shift from Europe toward Asia. A new group of major economic powers is emerging, with overall world military power spread among many more players. An increasing number of smaller, less developed nations will be able to support limited, but deadly, arsenals of high-technology "smart" weapons without the direct support of the Soviet Union or the United States. This development will decrease the military advantage and the political leverage the major powers have long enjoyed with their near monopoly of sophisticated systems.

In today's international environment, we must not only face the possibility of direct and indirect Soviet aggression, we must also prepare for the more likely and broader range of challenges in the Third World. Security concerns among regional powers may dominate our attention, as we seek stability in areas geographically distant and generally unfriendly to the concept of permanent American military presence.

Another immediate and striking trend is our decreasing ability to gain timely military access in areas threatened by aggression. Our recent Persian Gulf experience reflects how sensitive nations can be to the presence of foreign forces, and how our military options can be constrained to forces independent of bases ashore. At the same time we see the Soviets gain access to facilities located near key sea lanes in the South China Sea, the Indian Ocean, and in our own hemisphere.

Within this environment, America is a maritime nation, a fact reflected in the breadth and depth of diverse, economic, commercial and political interests binding us to our overseas friends and allies. Foreign trade grew to twenty percent of our gross national product by 1986. We are becoming a more geographically diverse trading nation, and one whose focus is increasingly south and west. Since 1979, our trade volume with the Pacific Rim has exceeded that of our Atlantic trade. In sum, our concerns for economic vitality, and for the requisite stability in international relations are global in scope.

Seapower: A Component of National Security

The President in his National Security Strategy Report recognizes the unique role maritime forces play in supporting our national military strategy: "Given the realities of our geostrategic position, fronting on two oceans, maritime superiority over any potential adversary is essential to support our alliance relationships and forward deployed forces."

Maritime superiority for us is not a luxury but an immutable requirement, and seapower is the chief guarantor of our survival as a maritime nation. Our interest in the high seas represents more than just an expression of commercial and trading concerns. It is a key facet of our national identity and demonstrates our resolve to sustain our position as the leader of a western alliance of like-minded nations. These nations' ability to pursue democratic ideals and unfettered economic enterprise is nearly as reliant on American seapower as is our own. The ability of our naval forces to protect sea lanes and to serve as a visible forward deployed expression of U. S. determination to protect our vital interests is essential to the framework from which our national security is derived.

Naval forces have long been the force of choice for addressing crises and deterring conflict. Since 1955 the Navy has been called upon in 153 cases to respond to crises involving international conflict, tension or terrorist activity, or to protect U.S. assets or citizens abroad, or as in the Persian Gulf area, to protect U.S. flag shipping. These actions represent roughly 80 percent of the instances where American armed forces have been employed in this period. Sea based forces are often the only forces available to react immediately in defense of national interests. Our sea services give the national command authority in all circustances the ability to maintain a credible presence just over the horizon from the scene of possible action.

Remembering the lessons of the oil shocks of 1973 and 1979, we are acting today in response to national "security" tasking in the Persian Gulf to keep the sea lanes open in the midst of an eight year old war between Iran and Iraq. Our naval presence has guaranteed the continued free flow of U.S. flag shipping through the gulf. We can and will continue to act quickly in time of crisis in cooperation with our allies and friends to protect our maritime interests. And once the political or military objective is realized, our naval forces can exercise one final quality of seapower, the ability to de-escalate rapidly, to resume peacetime activities of foreign policy support, exercises, training and maintenance.

If we do not focus attention on our ability to cope with violence far from our shores, we stand to lose support among Third World countries and among advocates of democracy worldwide who want to believe that the United States can protect its interests and its friends. As a crisis mounts, threatened friends and allies often find it increasingly difficult to call us in for assistance. In these circumstances, mobile, flexible forces of the sea services, the Navy and Marine Corps, offer the measured and decisive military means to act rapidly in American interests.

The contribution of American sea power to global stability lies in its ability to confound potential aggressors, using a broad range of options for military action -- broad in geographic scope, in time and in intensity. Sea services offer a means to preserve U.S. coupling to strong European defenses as we simultaneously contend with national commitments in other areas.

United States Strategic Objectives

In support of the National Security Objectives outlined by the President and Secretary of Defense in their annual reports, certain key objectives stand out as the rightful focus of future Navy and Marine Corps efforts:

- To deter war and, should deterrence fail, fight as far forward as possible to defeat armed aggression and to end the conflict on terms favorable to the United States, its allies and its interests at the lowest possible level of hostilities.
- To foster robust alliances to preserve western political identity and institutions, maintain international stability, and prevent hostile domination of vital areas.
- To maintain maritime superiority in the NATO area and in the Pacific Basin (including the Indian Ocean) and ensure that the continued economic growth of that region is protected.

- To ensure U.S. access to critical resources, markets, the oceans, and space.

As we invest in future military capability, we must maintain a stable deterrent against all-out conflict with the Soviet Union. In the aftermath of agreements on major reductions in nuclear weapons, the importance of survivable, accurate and responsive nuclear capability is dramatically increased. We will continue to require a nuclear backdrop for conventional deterrence in order to offset conventional imbalances. Additionally, we must foreclose the possibility of nuclear blackmail by the Soviets or anyone else.

We must concentrate on maintaining the technological advantage in key warfare areas, exploiting and countering extended-range, accurate, smart conventional weaponry. This means keeping a steady strain on our research and development activities to maintain an edge over competitive systems of our adversaries. Mobility and flexibility will be at a greater premium than ever, as we need to move swiftly, often in response to ambiguous warning. Support from space systems capable of global coverage will be crucial to our effectiveness to respond to local crises while monitoring potential adversaries' behavior.

Coordinating Our Defense with Allies

The United States will need to nurture even more carefully its links with allies worldwide in the context of greater economic interdependency and to compensate for a less manpower-intensive force structure.

The Navy and Marine Corps provide the sophisticated, mobile and flexible forces that can support our formal alliance commitments as well as our interests in international order and in the advance of democracy worldwide. Indeed, the viability of the U.S. Navy and Marine Corps will be even more critical to the defense of the Alliance in the aftermath of reductions of land based intermediate range missiles. Sea based nuclear systems and dual capable tactical aircraft still back up NATO's nuclear and conventional deterrent posture, remaining available for employment in NATO's strategy of "flexible response."

Despite all arms control negotiations and the best wishes of the disarmers, there is no indication that the Soviet naval forces our people face will be any smaller, less sophisticated or less prepared for war. Arrayed against our maritime forces is an increasingly sophisticated and capable Soviet Navy, along with an increasingly lethal, high-tech threat from non-Soviet adversaries. It is precisely those threats and risks that require our continuous commitment to maritime superiority. We must prevail at sea and keep the sea lanes open for essential reenforcement from the combined industrial base of the United States, European and Pacific economies in order to assure a favorable outcome for any future conflict. The role of Pacific and Third World products and resources in sustaining the United States mobilization and industrial base is becoming more critical each year. Our attention to the Pacific is justified as supporting -- rather than competing with -- the defense of the NATO alliance.

Maritime Strategy

The maritime component of U.S. National Security Strategy, as articulated by our senior naval leadership in Washington and in the Fleet, is a flexible, integrated, and broadly articulated framework, which serves to guide commanders, not encumber them.

It is not a new or a "go it alone" strategy, but rather the articulation of maritime goals and principles which have been with us for most of the past fifty years. To me the maritime strategy represents the collected wisdom and experience of our fleet commanders, that we defend ourselves and our allies as far forward as possible, taking advantage of our strategic strengths.

We support the national strategy of deterrence by providing a formidable, convincing and forward naval presence that demonstrates an ability to prevail in war, and that visibly and tangibly conveys our commitment to our many overseas interests, allies, and friends. We operate today as we would in war, forward, where our allies live and where potential aggression must be deterred. High readiness, a forward deployed posture, and an ability to concentrate quickly and just as rapidly disappear back into the sea, are enduring strengths of American seapower which will grow in importance in an era of possibly historic strategic arms control agreements with the Soviet Union.

Force Structure: the Shape of Our Defense

Our nation's ability to affect world events is most often measured by the size and capability of its Navy. The size of our fleet provides the tangible evidence that U. S. national interests around the world will be protected. As with Great Britain, who for centuries was Queen of the Seas, this is simply a fact of economic and geographic necessity. By contrast, the nations which concentrate on naval power without such geographic and economic necessity, such as prewar Germany and today's Soviet Union, should give us alarm. Since World War II, allied navies around the world have declined while the Soviet Navy has dramatically expanded in numbers and capability. The Soviet submarine fleet is now 55 percent larger than the combined submarine fleets of the western alliances.

The Navy we have been building since 1981 represents less an innovation of strategy than simply the long overdue effort to close the gap between political ends and military means. The Department of the Navy force levels supported by Congress for the past seven years will provide the minimum essential ships, aircraft, submarines and Marine forces that form the vital dimension of our naval renaissance. This administration's commitment to a fully supported, balanced fleet with an appropriate mix of ships and aircraft -- centered around 15 carriers, four battleships, 100 attack submarines, adequate numbers of ballistic missile submarines, and sealift to support an assault echelon of a Marine expeditionary force and a Marine expeditionary brigade -- is a commitment to maintain the minimum force required for maritime superiority.

Our ballistic missile submarine force provides the greatest deterrent to the Soviet nuclear threat, providing the most survivable half of the country's nuclear capability at one-fourth of the overall cost of our national strategic nuclear forces. Below the seas, our naturally stealthy attack submarines, equipped with our "smartest" weapons, play a unique role in deterrence of Soviet or other aggression. The SSNs stand ready to operate against the Soviet attack submarine threat in forward areas, thus most efficiently preventing interdiction of our shipping, while destroying enemy ballistic missile submarines, surface forces, shipping and selected high value land targets. Our carrier battle groups and amphibious forces have the requisite maneuverability for power projection at points of our choosing, whether in situations of crisis or major conflict.

While our carrier battle groups control the air and the sea, our Marine Air Ground Task Forces can project power ashore. The

Marine Corps is the most sophisticated combined arms fighting force in the world, with ground and air capability projected from the sea. In addition, power projection ashore is augmented by battle force surface combatants and submarines with *Tomahawk* missiles that enhance their standoff capability while presenting a powerful threat to any enemy surface action group.

In sum, it is clear that in an era of worldwide shifts in trade and economic capacity, tight budgets and arms control agreements, the Navy and Marine Corps make a unique contribution both to Alliance defense and to support of U.S. interests in international order and in the advance of democracy worldwide. The United States Navy and Marine Corps offer important tactical options necessary for continued deterrence after reductions in nuclear or conventional forces -- against Soviet aggression and in Third World contingencies anywhere on the globe. Their utility and effectiveness are proven every day, in the Atlantic, Pacific, Caribbean, Indian Ocean and most visibly today in the Persian Gulf.

II. NAVY/MARINE OPERATIONS IN 1987

Foreign Policy Support

As the Secretary of Defense noted in his annual report last month, our maritime strategy continues to serve our nation well, as exemplified by world events in 1987. In the Persian Gulf, the flexibility of naval forces in response to emergent national tasking is demonstrated on a daily basis. A considerable Navy presence will likely continue for the foreseeable future until the threat to shipping has been eliminated. At that time we can return to a more moderate level of operations. A brief review of the Navy's extensive contributions to the goals of U.S. policy in the Gulf region demonstrates the continuing value of naval forces in coping with the complex challenges of this era of "violent peace".

As of 26 February 1988, 37 convoys, including 87 U.S. flagged ships had made transits of the Gulf under U.S. escort. Threats to their safe passage were met with firm and decisive action. In September 1987, the Iranian ship *Iran Ajr* was caught laying mines in international waters of the Persian Gulf. The Iranian ship was attacked by U.S. Army helicopters operating from Navy ships in the area. The Iranian ship was abandoned by its crew, who were apprehended and later turned over to international authorities for return to Iran. In all, 26 Iranian crewmen and three bodies were returned. The *Iran Ajr* was sunk. In another incident, one Iranian patrol boat was destroyed and two were disabled by helicopter attack after the boats fired on a U.S. helicopter. Six Iranian survivors were picked up, two of whom later died of wounds received in the exchange.

In October 1987, four destroyers, USS *Kidd* (DDG 993), USS *Hoel* (DDG 13), USS *Leftwich* (DD 984) and USS *John Young* (DD 973), shelled an Iranian oil platform in the central Persian Gulf and Navy personnel destroyed communications and radar equipment on another. The platforms, formerly used to drill for oil, were being used as bases for Iranian operations. The strike was in response to Iran's Silkworm missile attack on an American-flagged Kuwaiti tanker in Kuwaiti waters.

Operating Tempo and the Fleet

The impact of these continuing actions in the Persian Gulf on our ships and people portend, unless we are careful, a possible return to the adverse trends encountered prior to this administration's naval recovery program. Units in the Persian

Gulf today are underway 75-85 days per three month quarter. The Navy is funded for an average of 50.5 days per quarter. The difference is made up by decreasing the underway time of nondeployed units, keeping them in home port rather than on exercises and weapons ranges preparing for combat. The incremental cost for Persian Gulf contingency operations in FY 1988 may be as high as $240 million. To date, Congress has provided $100 million.

Family separation resulting from high levels of operational deployment remains the primary reason why young officers and enlisted men choose to leave the Navy. Long months of vigilance in crisis areas are today stressing the Fleet. In the holiday period at the end of 1987, 96 ships were forward deployed: 30 in the Persian Gulf, 9 in the Indian Ocean, 34 in the Western Pacific, and 23 in the Mediterranean Sea. Congressional support is necessary if we are to adhere to our commitment to reasonable deployment schedules of a maximum of six months away from home port. Naval personnel on sea duty are assured they will be in home port at least 50 percent of the time between overhaul cycles, with a deployment turnaround ratio of 2:1 or better, meaning that if a person is deployed for six months, the next twelve months will be spent in or near the home port.

Joint Training and Exercises

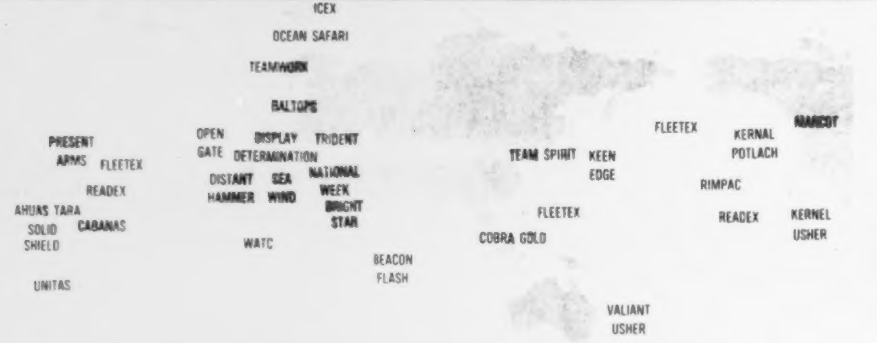
Events in the Persian Gulf area in the past year have naturally heightened public awareness of the utility and demands placed on our sea services. But the Navy and Marine Corps operate globally, with the U.S. Army and Air Force and the forces of our allies and friends, maintaining the levels of training and readiness that contribute to deterrence against the entire spectrum of possible adversaries. The only real difference between the sea services' activities in peace and war is in operating tempo and casualties. We exercise our forces in the environments and the geographic areas in which they may see action. Here are only a few examples from the past year:

- In the Atlantic area, the U.S. Second Fleet conducted a series of multi-ship and battlegroup exercises such as Fleet Exercise 1-87 in the Atlantic and Western Caribbean Sea. The exercise included 18 U.S. ships and over 5500 U.S. servicemen. Allied participation included British naval units of their Caribbean Training Task Force, the aircraft carrier HMS Ark Royal, with three destroyers and two frigates, as well as NATO's Standing Naval Force Atlantic, with combatant ships from The Netherlands, Canada, the United Kingdom, Germany and the United States. The USS Forrestal (CV 59) battle group, along with Navy logistics support and mine countermeasure ships, participated in NATO's 1987 Ocean Safari exercise where they practiced the protection of resupply and reinforcement shipping in support of NATO.

- In the Mediterranean, our sea services participated in exercise National Week, involving 29 ships and 180 aircraft. French armed forces, including the aircraft carrier Foch, participated in some parts of the exercise with the USS Nimitz (CVN 68) and USS John F. Kennedy (CV 67) battle groups. The exercise involved simulated strikes against land and sea targets, as well as sea control and amphibious actions. Soviet units in the area at the same time included the aircraft carrier Kiev with four escorts.

- In the Pacific area, our forces participated in the first amphibious operation in Alaska's Aleutian Islands area since World War II. Its purpose was to provide training in landing assault forces during extreme cold weather, in this case 18-20 foot seas and gale force winds. The forces included an aircraft carrier battle group, with more than 10,000 sailors and 14 ships, supporting an amphibious squadron with 1,900 marines. Both sea and air landings were accomplished, demonstrating our national resolve to defend our interests in the northern Pacific area. Multi-national exercises in the Northeast Asia included Team Spirit with forces of the Republic of Korea and exercises with the Japanese Maritime Self-Defense Force.

MARITIME FORCES - JOINT AND COMBINED EXERCISES



- ALLIED CONTRIBUTIONS
  - SURFACE COMBATANTS
  - SSNs/SS
  - MARITIME PATROL AIRCRAFT
  - MINE COUNTERMEASURES
- ENHANCES DETERRENCE
  - STRENGTHENS ALLIANCES
  - STANDARDIZES PROCEDURES
  - MAINTAINS READINESS
  - TESTS CAPABILITIES

- In Central America, more than 40,000 soldiers, sailors, airmen, Marines and Coast Guardsmen participated in Solid Shield 87, an exercise designed to emphasize command and control of military forces with a friendly nation in a combat environment. Navy and Marine forces joined Honduran Army and Navy forces to conduct a amphibious assault on a beach on the north coast of Honduras. During the amphibious assault phases, U.S. Navy, Air Force and Marine aircraft, along with Navy and Coast Guard ships, simulated anti-air, surface and submarine attacks on the amphibious task force.

- The Navy continued in 1987 to expand its proficiency in Arctic Operations. Included in our efforts was ICEX 1-87, a coordinated U.S. and British mission conducted to collect scientific data in the Arctic Ocean and to continue validation of the readiness of our nuclear submarine forces to operate in the harsh Arctic environment. ICEX 1-87 was highlighted by the first simultaneous surfacing at the geographic north pole by one UK and two U.S. nuclear submarines. In the past three years almost half of our Arctic capable nuclear submarine crews have operated in the deep Arctic environment. The maintenance of our proficiency in conducting Arctic operations ensures that we are "combat ready" to engage potential adversaries as far forward as possible including under the ice. Our tactical capability in this vital area will be expanded further with the delivery of the first fully Arctic capable Improved SSN688 class submarine in FY 1988.

° The Marine Corps will participate in 195 exercises in FY 1988 and in 190 exercises in FY 1989. Marines refine their skills in exercises worldwide in a variety of missions ranging from special operations to support for naval campaigns. In the Republic of Korea during *Team Spirit*, Marines conducted a brigade size amphibious assault, including a Maritime Prepositioning Force. Two ships of the Maritime Prepositioning Squadron were unloaded and the equipment distributed to arriving Marines. During *Solid Shield* in Central America, the 4th Marine Expeditionary Brigade conducted a joint-combined amphibious operation with the U.S. Army 82nd Airborne Division, and Royal Marines from the United Kingdom and The Netherlands. In Norway, in exercise *Cold Winter*, Marines exercised the land prepositioning program, demonstrating the capability to support NATO's northern flank.

° Also in support of our national interests, *USNS Mercy* (T-AH 19) completed a 62-day humanitarian training mission, providing medical care to more than 62,000 Filipinos. Her staff performed major surgery on 848 patients aboard ship and 1,108 minor operations ashore at local medical/dental civic action projects in seven Philippine ports.

Naval Special Warfare Operations

Naval Special Warfare Operations saw a marked increase in tempo in 1987-1988. While both Seals and Special Boats deployed in the Persian Gulf, Special Warfare assets continued to participate in major fleet, joint, and combined exercises worldwide. Special Boat Unit 26 (Panama) was commissioned to provide USCINCSOUTH an organic coastal and riverine capability. Naval Special Warfare Command (Coronado) was commissioned as the Naval component of the newly created U.S. Special Operations Command. Groundwork was laid for forming Seal Team 8 (Norfolk) and Naval Special Warfare Unit 8 (Panama) in 1988, and Naval Special Warfare Unit 6 (Southern Europe) in 1989.

Navy and Marine Corps Reserve

The Naval Reserve contains several components which exist only in the Reserve: 100 percent of the Navy's U. S. based logistics support squadrons; 100 percent of light-attack helicopter squadrons; 100 percent of our combat helicopter search and rescue capability; and 100 percent of naval mobile inshore/undersea warfare units -- the "Brown-Water Navy" -- structured for combat on inland waterways. The Naval Reserve also provides: 99 percent of Naval Control of Shipping organization manning for merchant ship mobilization and convoy formation; 93 percent of the cargo-handling battalions vital to port management and loading operations in combat theaters; 82 percent of our ocean-going minesweepers; 65 percent of naval mobile construction battalions, the famed Seabees; 57 percent of special boat forces; 49 percent of naval intelligence personnel; 35 percent of antisubmarine patrol aircraft squadrons; 25 percent of airborne mine countermeasures squadrons (HM); 18 percent of ASW helicopter squadrons (LAMPS I) needed for fleet and convoy antisubmarine defense efforts; and 13 percent of our tactical sea based aviation capabilities. Perhaps our most critical reliance on the Reserves is in medical services, where 5 of our 12 fleet hospitals in FY 1989 will be reserve manned, with Reserve medical personnel also needed for expanding capabilities at other U.S. based hospitals.

Reorganization of the Naval Reserve to a "horizontal integration" with the active force, begun in 1982, has had the effect of shifting a substantial portion of our force structure manning to the Ready Reserve. Increased reliance on the Ready Reserve has enabled us to reduce our original estimates of required active end-strength growth.

- In FY 1988 and 1989, 48 ships will be manned by Selected Reserves, in addition to the augmentation of essentially all naval units by Selected Reserves upon mobilization.

- The 14th active carrier air wing has been deleted from the program for FY 1989. The 14th carrier will carry a reserve air wing.

- Twenty-one modern Oliver Hazard Perry and Knox class frigates have been transferred to the Naval Reserve Force, with a total program of 26 frigates planned by 1990.

- By the mid-1990s, 14 MCM and 7 MHC mine warfare ships will join the Naval Reserve.

- The first reserve squadron has now completed transition to the F/A-18 with a second squadron transitioning this year. Two fighter squadrons have transitioned to the F-14A and the other two will complete transition this fiscal year. The first reserve A-6E squadron stands up this fiscal year, and the second one will follow in FY 1990.

- Squadron augmentation flying units have been established and are operating successfully in Fleet Replacement Squadrons on both coasts, providing currently trained aviators and maintenance personnel for immediate augmentation to active duty squadrons.

The Marine Corps relies heavily on a fully trained and capable Reserve component to complement its active force. Upon mobilization, this Reserve component provides up to 33 percent of the Marine Corps' wartime manpower requirements. The Reserves provide 40 percent of Marine tanks; 33 percent of the heavy artillery; 30 percent of the light attack aircraft; and 33 percent of the anti-aircraft missile capability.

The Marine Corps Reserve has made great progress over the past six years. Enhancements in military capability include equipping the Marine artillery battalions with the M-198 howitzer in FYs 1988 and 1989, increasing the deliveries of the TOW missile systems in FY 1988, and the activation of a light armored vehicle (LAV) battalion in FYs 1987 and 1988. Marine Reserve aviation assets also have been the subject of an intensive modernization effort. Increased combat capability has been gained by the activation of an additional AH-1J Cobra attack helicopter squadron and a new KC-130 refueler squadron in FY 1988. Additional enhancements include the employment of the F-21A Kfir aircraft by a Reserve squadron to provide adversary training for Marine tactical air assets. In 1989, the Marine Reserve will begin transitioning to an all F/A-18 Reserve fighter/attack force, providing advanced aircraft and commonality and interoperability with the active wings.

Navy Department Programs

The effectiveness and combat readiness of the Navy and Marine Corps, as tangibly demonstrated by the real-world operations and exercises conducted in 1987, depend on motivated, highly trained people who man effective ships, fly modern aircraft, control reliable weapons, and who can count on filled weapons bins. These are the contours that define the Department of the Navy's portion of the President's Defense Budget. In revising the FY 1989 budget submission, our watchwords have been balance and acceptable risk. There is no indication that the future holds any reduction in the commitments our forces will keep around the world. We have been forced to accept an increased level of risk in being able to respond to threats to our national security. We have worked hard to ensure that our program reductions are balanced and that we have not introduced unacceptable risk levels in any program area.

Highlights and key details of the programs which describe our priorities in shipbuilding, aircraft, weapon systems, Marine Corps systems and support requirements are presented in the statements of the Chief of Naval Operations and the Commandant of the Marine Corps.

In the sections that follow, I will address several issues of personal importance to me that affect all of our people and programs in sea services.

III. PEOPLE

The Chief of Naval Operations, the Commandant of the Marine Corps and I are in absolute agreement on the vital nature of proper recruitment, training and retention of our most precious asset, our people. The best of our technology is only as good as the individual sailor and Marine at its controls. Our men and women's selfless dedication and strength of character are evident daily in the Fleet as they honor national commitments, endure the stress of prolonged absences from families and accept the risks of armed service in troubled areas around the world.

End Strength

After a detailed review of our personnel policies, we have adopted the most austere manning policies possible for our operational units. Navy active and reserve end strength for FY 1989 has been held to the FY 1988 levels of 593,200 and 152,600 respectively. Marine Corps active strength has been reduced to 197,200 while reserve end strength has been capped at the FY 1988 level of 43,600. This is an end strength reduction of 9,600 for Navy and 2,900 for the Marine Corps from the President's FY 1988 budget request.

Our global commitments highlight the danger in adopting a posture that would degrade our readiness and capabilities. In effecting this austere policy we have taken balanced reductions to protect our ability to respond to crises without mortgaging our future. Our challenge now is the precise management of our personnel to maintain readiness without sacrificing the basic needs of our people.

Further forced reductions in our officer corps proposed for FY 1989 pose serious challenges to our ability to man and manage the sea services without serious hardships for our people. We have only to look at the recent past to see how honoring our commitments with insufficient manpower can wear out our people. Operating tempo is not likely to decrease. At the same time that operational officer requirements are increasing, we must assign substantial numbers of top mid-grade officers to joint duty assignments ashore to comply with new joint officer management policies. These joint duty requirements are also likely to affect adversely our graduate education programs which are vital, not only to adequately performing many jobs requiring such training, but also to the proper broadening of our future leaders. Our officer requirements are not decreasing. Our best officers, because of increasing operational demands and the requirements of joint duty, will have very limited opportunity for graduate education. We are examining ways to deal with this problem, but no easy solutions are in sight.

The officer to enlisted ratio of the Navy and Marine Corps is among the best in the world, even in comparison to allied navies. The Navy and Marine Corps are the only two services that meet the HASC goal of one officer to every 6.5 enlisted persons. However, ratios are not necessarily valid for use in a requirements determination process. Technology changes or additional medical or Joint officer requirements are valid reasons for growth in the officer corps without corresponding enlisted force growth.

Today's austere budget forces each service to carefully analyze its requirements before determining the characterization of each billet as either officer, enlisted or civilian. The current ratios reflect these changes. The Navy and Marine Corps portion of the Defense Officer requirements study on this issue offers a complete explanation of the officer requirements determination process. This process provides an accurate accounting and justification of Navy and Marine Corps officer requirements.

We have reviewed carefully the justification for our FY 1989 budget submission and have taken all economies possible without decreasing our readiness or adversely affecting our people. We have properly sized our officer corps, and we feel that the congressional mandate for further reductions is not justified. Our commitment to our people extends to their overall health and welfare. Our medical structure requires immediate growth, which we are supporting. However, growth in this area means reductions in other officer specialities. Limits on officer end strength will not enable us to meet both peacetime and wartime commitments. Arbitrary reductions in our officer end strength will reduce dearly needed muscle and sinew -- not fat -- and will affect adversely the combat readiness of your Navy and Marine Corps.

Return on Investment: Personnel Readiness

We must support programs that will ensure continued personnel readiness and must not neglect programs which affect directly the families of our sailors and Marines. The FY 1989 Budget continues to place personnel readiness at the top of spending priorities. Nothing is more important than our people.

Family separation, stemming from the high tempo of operations, remains the number one reason why young officers and enlisted men and women choose to leave the Navy. We have made significant progress and improvement in this area. Schedules were modified to eliminate excessive at sea periods for ships and aircraft squadrons and to ensure all units deployed will spend no more than six months away from homeport. We believe that if we are to improve our retention efforts we must remain committed to easing the burden of family separation. As the Navy grows to meet its global commitments, we must respond with programs and incentives that protect our sailors, Marines and their families.

Our success in this area can only be measured by the maintenance of adequate compensation and adequate quality of life. Pay caps since FY 1982 have resulted in a disparity between military pay and private sector wage growth of about 11 percent as measured by the Employment Cost Index. I fully support the DOD request for a 4.3% pay raise for our sailors and Marines.

The Selective Reenlistment Bonus (SRB) -- targeted at sea intensive critical skills -- is one of our most potent incentives for retention. Specifically, it is tailored to those skills with significant retention problems and for which training and replacement costs are high. Personnel technically trained in advanced electronics and engineering skills have ready alternative employment openings in the civilian sector. SRB remains the most cost effective program to retain these critical skills. On the average, each dollar invested in SRB saves two and one-half dollars in training and replacement costs. Historically, a large reduction in SRB award level has had an immediate and severe impact on skill retention. This program must continue without disruption if we are to retain skilled individuals.

We are experiencing a severe exodus of experienced pilots to the airlines. Family separation and the availability of lucrative airline careers are the primary reasons for these losses. Aviation Officer Continuation Pay (AOCP) is targeted at our aviation communities with the most critical shortfalls. AOCP has proven to be effective in managing retention, however, in recent years its incentive value has been greatly reduced because of static bonus award levels. The Air Force is also experiencing retention problems and we are working with them to submit a joint proposal to restore the incentive value of this critical program.

The goal of minimizing permanent change of duty station (PCS) costs must work a careful balance between quality of life, hardships of extended sea and isolated duty, and professional development to build and retain a ready, high quality career force. Cuts in end strength and funding would severely complicate an already difficult problem. Our estimates for FY 1989 indicate that we may not be able to make all required moves with the proposed funding levels. This will mean longer family separations when assigned to sea duty, a probable decrease in retention and morale, and a final outcome of decreased fleet readiness.

As ship's home ports become more widely dispersed, it is not feasible to have the number and diversity of shore billets in each home port that would allow many sailors to rotate between sea and shore duty at no cost. Our ability to reduce PCS moves is limited by requirements to support equitable sea/shore rotations and established overseas tour lengths. We need your support for the funding to execute a balanced PCS program -- to recruit, train, assign and retain our best people while correcting personnel imbalances, providing necessary leadership, and meeting our manning requirements.

The current projection for military housing is a bare minimum to support retention and operational readiness. The FY 1989 Navy Housing program will build 1,656 units of new family housing. Additionally, with the Navy facing a deteriorating family housing inventory (75 percent of existing housing is over 25 years old), we can ill afford a reduction in maintenance below the Presidential Budget Levels. Cuts in housing affect severely those junior enlisted personnel least able to survive in high cost areas. We must support these programs and other initiatives we will pursue in the areas of housing and variable housing allowance (VHA). If our personnel are not provided what they consider to be adequate housing for their families, they will again begin to leave the service -- particularly those with easily marketable skills.

I cannot overemphasize that the readiness of the Navy is directly related to the capability of our people. The Navy and Marine Corps are dealing with the problems created by the growing number of single parents and working spouses requiring your support for our programs in child care and family services. We have established successful programs that encourage healthy lifestyles through hypertension control, fitness/exercise, smoking prevention/elimination, nutrition awareness and stress management. We remain fully committed to the policy of Zero Tolerance toward drug and alcohol abuse. Our firm stand in these areas will help ensure that we retain the highest caliber of individuals.

Rising manpower costs, a shrinking pool of high school and college graduates and competition from the private sector will combine to make recruiting and retention of our men and women a particularly tough challenge. Success begins with a strong commitment to people -- those currently on board, and those we intend to recruit. The next key is a recruiting program aimed at the individual who will be successful throughout his military service. Although recruiting in FY 1987 was successful, this was largely due to a temporary increase in field recruiters. Funding cutbacks in recruiting and advertising severely handicap our efforts and will likely prevent us from meeting recruiting goals, both in quantity and quality. Congressionally approved funding for Navy recruit advertising in real terms is at the lowest level since FY 1985, even though Navy enlistment objectives are larger now than at any time since FY 1982. Recently we have observed that the limited funding provided for Navy advertising has resulted in new lows in national youth awareness surveys. Effective advertising on national television and in the print media is essential to positive recruiting results in the field. For success in the future, we must recruit now those young men and women who will lead us into the 21st century. We need your full support for the minimal funding levels for both recruiting and advertising requested in FY 1989.

Women in Navy and Marine Corps

During the past fifteen years there has been steady and significant progress in managing the rapid introduction of large numbers of women into an historically male organization. The number of women in the Navy increased from about 9000 in 1972 to more than 54,000 today, more than nine percent of our active force structure. Women are succeeding, and policies are evolving to keep pace with their growing numbers, seniority, expectations and advancement opportunities. In September 1987, we began an in-depth review of the progress of women in the Navy and Marine Corps and an assessment of the effectiveness of existing policies. The Chief of Naval Operations and the Commandant of the Marine Corps convened study groups to examine command environment and quality of life issues, job assignments open to women, sea/shore rotation policies, promotions and command opportunities.

Acting on the results of this effort, we have expanded the opportunity for women to serve at sea by authorizing their assignment to selected ships of the Combat Logistics Force. This includes certain oilers, ammunition ships, and stores ships. Aircrew assignment with shore based Fleet Air Reconnaissance squadrons also will be opened to women. This expansion is following a careful ship-by-ship approach, and will require significant adjustments in living spaces aboard each ship. It will also require larger numbers of appropriately trained women. In addition the Marine Corps will begin to expand opportunities for women as Marine Security Guards in our embassies overseas.

We have changed recruiting and personnel policy to improve our women's advancement opportunities for both officer and enlisted sailors and Marines. We are developing plans to support a balanced enlisted sea/shore rotation policy and equitable promotion opportunities. We have directed that commands enforce strictly the regulations against sexual harassment of women sailors and Marines. We have expanded training to clear the air for both men and women; that men understand the nature of women's concern for dignity and professional working relationships, and that women understand the grievance reporting procedures. We will not tolerate sexual harassment in any form.

That women will play a larger role in the defense of our freedom is a simple fact of life. It simply makes sense to employ women fully wherever permitted by law.

Our People: Our Prime Concern

In summary, the personnel problems we face are highly complex and interwoven. The Department of the Navy has submitted a funding plan that carefully addresses each item. Each piece depends on the other for its success. Arbitrary reductions in end strength or funding will hinder our efforts and will ultimately weaken combat readiness. The success of the Navy and Marine Corps depends less on technology than on the ability to recruit, train, and retain quality people. For all the intrinsic excellence of our technology, experience has shown that success in battle depends on the integrity, courage, commitment and professional excellence of those who bring that technology to bear in the defense of freedom.

IV. NAVY MEDICAL CARE

When Secretary Webb testified before the House Armed Services Subcommittee on Compensation and Personnel in October 1987, he spoke of the game plan to correct the problem confronting Navy medicine. Briefly stated, the plan was to bring together a team of top medical leadership, candidly assess the current state of Navy medicine, educate all Navy leadership on the problems, and develop achievable short- and long-term solutions. Our approach is to balance long-term solutions with short-term priorities, rather than to focus exclusively on short-term "squeaky wheels" or long-term big-picture solutions.

Our assessment of naval medicine covered both peacetime and wartime medical readiness in eight specific areas -- command, control, and communications; policy formulation and implementation; manpower and staffing; professional training and career development; R&D; resource requirements and constraints; wartime medical readiness; and, alternatives for peacetime health care delivery. The assessment concluded that without a long-term application of additional resources, Navy medicine will continue to be "in extremis." The system is besieged by escalating demands from the population it serves. The retiree component of our peacetime beneficiary population is getting larger and older. The case mix of this population is shifting towards the resource intensive chronic care required by the aging. For example, we project that between FY 1986 an 1993 the number of retired personnel and their dependents will grow by ten percent. During this same period, we expect the number of dependents of active duty personnel to increase by five percent.

Today, patient access is so limited in some locations that we cannot provide timely care to other than active duty personnel. This constricted access forces other beneficiaries into the more costly CHAMPUS program. We are watching carefully the recent implementation of the CHAMPUS Reform Initiative in California and Hawaii. We hope it will help the problem of beneficiary access and CHAMPUS cost control. The West Coast is one of the Navy's largest concentrations of active and retired populations, but it represents only a portion of our commitments worldwide.

Concurrent with the assessment effort, we assembled a common data base, or planning matrix, to provide a snapshot look at medical treatment facilities and the tempo of health care. We are developing now a computer-based decision support system for our hospitals, compatible with Department of Defense efforts, that will allow us to monitor hospital performance and to make informed judgments about the best use of medical resources.

Manpower, Staffing and Career Development

People are the Navy's most valuable resource -- this is particularly true in the practice of Navy medicine. Our total inventory of active duty medical personnel is about 41,023. This includes 3,898 physicians, 1,710 dentists, 3,104 nurses, 2,435 administrators and allied health personnel, 259 physician's assistants and 29,911 enlisted personnel. There are also about 9,000 civilians working in our health care system. However, we estimate that about 3,000 additional personnel are needed to operate our medical treatment facilities at full capacity.

Our medical manpower situation has been handicapped by difficulties in recruiting and retaining medical personnel. We have not been successful in the past in recruiting fully-trained physicians "off the street" and have had to rely on the Health Professions Scholarship Program and Reserve education programs. Additionally, we are losing physicians at the end of obligatory payback periods -- just when they are reaching full stride professionally. Annual recruiting goals for nurses vary significantly from year to year, resulting in an uneven flow in the nursing pipeline. But, we have taken steps to correct these problems, and have turned the corner in recruiting. We now have 45 dedicated active duty medical recruiters, with another 15 arriving by March. We have shortened the accession process from an average processing time of 285 days down to a current average of 85 days. Our target is 60 days. The Surgeon General personally contacted many physicians who recently left active duty concerning their interest in returning to active service. The initial results are encouraging. In the first four months of FY 1988, we recruited 30 doctors (11 recalls and 19 direct appointments). This is double the number of direct accessions achieved during FY 1987.

We also are seeking to increase the number of Armed Forces Health Professions Scholarships from 975 to 1,050 per year, with an ultimate goal of 1,200 scholarships, since this program is our best source of new high quality Navy doctors. Selected active duty physicians will receive training at the Navy's recruiting school to become more effective spokesmen for Navy medicine. And, we are planning a pilot program in which Reserve medical personnel will be able to work on a regularly scheduled basis at our medical treatment facilities to augment the hospitals' staffing.

Alternatives for Peacetime Health Care Delivery

Our peacetime health care delivery goal is to have fully utilized and fully staffed medical treatment facilities. Much of our medical planning effort in FY 1988 will continue to address alternatives for peacetime health care delivery that will return patients to our hospitals.

We are encouraged with the progress in our four NavCare clinics as alternatives to the more expensive CHAMPUS program, and to the often-crowded medical treatment facility outpatient clinics. Both the six new clinics and the existing four clinics will have expanded capability, including chronic care, mammography services, and a full-time medical director at each clinic for quality assurance and administrative purposes. The NavCare visits' costs are running at about 60 percent of the cost of a CHAMPUS visit and the utilization is up about 30 percent over the FY 1987 levels. We are planning to open up six more clinics in late FY 1988, located in Norfolk, San Diego, San Francisco, Long Beach, Ocean Side, California and Charleston.

We also are planning for our catchment area management project in Charleston. We have submitted our conceptual plan to the Assistant Secretary of Defense for Health Affairs and have selected our implementation cadre. Our emphasis will be to encourage private sector involvement locally to maximize use of our resources and increase access of our beneficiaries to the health care system overall. Under an enrollment system, beneficiaries will be treated either at the Naval Hospital, or from local physicians under contract, to provide care for beneficiaries at a cost below prevailing CHAMPUS rates for the region.

Operational Medicine and Wartime Medical Care

Because of the Navy's forward-deployed status much of our operational medical support is an ongoing peacetime activity. There are more than 320 physicians and 4,600 corpsmen assigned to Navy afloat units and more than 200 physicians and some 2,800 hospital corpsmen assigned to deployed units of the Marine Corps.

Important progress has been made in providing medical support to the operational units. Three of the numbered fleets now have full time, dedicated Fleet Medical Officers. Many of our operational units, including aircraft carrier and battleship battle groups, destroyer squadrons, amphibious ready groups, marine expeditionary forces and others, have unit physicians providing underway support.

Our objective is to create permanent, full time organic medical capability for the Atlantic and Pacific fleets. Each fleet will have two surgical units assigned to provide medical support to deploying units. When not deployed, these assets will be used by the hospitals at their bases of operations. The teams will also help us to stabilize our medical personnel situation. For personnel who are not assigned to one of the teams, the likelihood of unscheduled deployments will be significantly reduced if not completely eliminated.

The cornerstone of our wartime medical capability is the deployable medical systems (DEPMEDS) -- the fleet hospital units and the hospital shops -- and the personnel to staff them. Our current program has 20 fleet hospitals. Sixteen of the twenty are approved and funded and the remaining four are in the Navy's five-year procurement plan. The first three fleet hospital units reached initial operating capability (IOC) during FY 1987, and five more will reach IOC in FY 1988. These will provide an additional 2,500 beds for our combat forces in theater.

Navy Medical Strategy

Navy peacetime health care will be characterized in the early 1990's by more patients receiving the care they need in the most appropriate place at the most appropriate time. We will have fully implemented Joint Health Care Manpower Staffing Standards to validate staffing in all of our hospitals. In the short-term, we will bring more CHAMPUS workload back into our military treatment facilities by contracting for health care providers. This short-term solution, about two years, gradually will be supplanted by the introduction of additional active duty personnel as our budgeting, recruiting and training programs mature and begin to provide a reliable pipeline of medical professionals and support staff. Where possible and cost effective, residual CHAMPUS care would be provided through alternative delivery systems, such as planned in catchment area management. The health care delivery alternative that best fits a given area and provides a comprehensive array of high quality services at an affordable price will be the solution of choice.

The key ingredient to making this vision a reality is the support of Congress. The Surgeon General, the Chief of Naval Operations, the Commandant of the Marine Corps and I are committed to making the investments that, when mature, will bring increased access to heath services to our people. The President's budget submission included requests for $98 million in FY 1989 to support our contracting initiatives. The growth in the medical manpower accounts assumes no cuts will be made by the Congress.

In summary, Navy medicine needs attention. Our many beneficiaries are becoming disenchanted with our system because of its inability to care for their needs. We took a comprehensive look at our medical system and identified short-term and long-term solutions. Our program strategy is achievable but we must have the continued support of the Congress.

V. NAVY MANAGEMENT INITIATIVES

As funding becomes even more austere, fiscal and management initiatives to reduce aquisition cost and to protect our essential industrial base are more important than ever. We continue to develop initiatives to rationalize Navy expenditure for equipment, maintenance, and capital improvements. The Department of the Navy has had underway since 1984 a series of reforms directed at improving the management of the Department of the Navy's industrial activity operations.

Navy Industrial Improvement Program

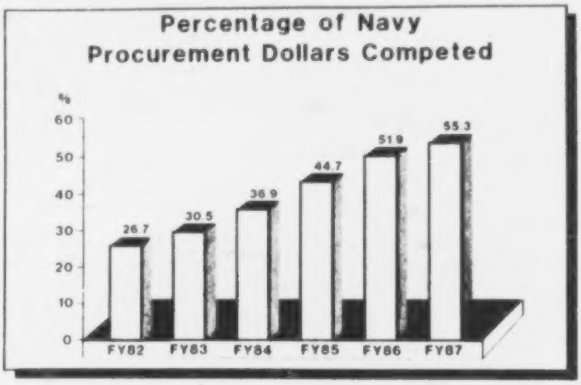
The Navy Industrial Improvement Program represents a fundamental change in the way we want our shipyards, laboratories, and data automation activities to do business in supporting fleet requirements. We are streamlining our industrial operations and management to make them as efficient as our nation's best run private industries.

These efforts to improve the way we do business began well in advance of recent defense reform legislation and are critical during this period of intense fiscal pressure. The primary emphasis of the program is to drive cost of work down while sustaining or improving quality. We are achieving these objectives through tighter cost control, better work scheduling/execution practices, more efficient material management, lower overhead, prudent management of overtime, more effective planning, and continued investment in training.

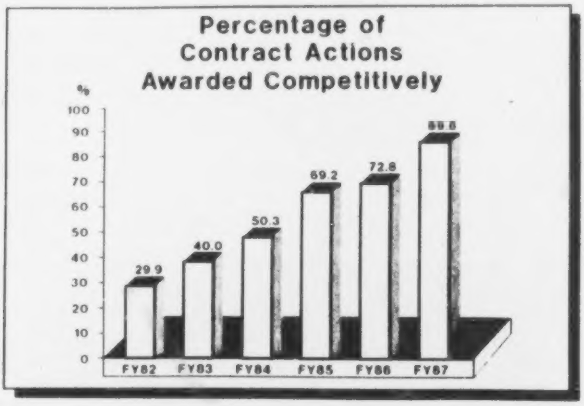
Public versus private sector competition is focusing our industrial activity managers and workers on the importance of their individual efforts in reducing costs and improving quality. It will continue to stimulate examination and improvements in industrial processes and operations in both sectors. By making our industrial activities more responsive and efficient, the Navy Industrial Improvement Program philosophy mirrors the finding of the Packard Commission Report on Defense Management: if you trust people to do a good job and create a situation where everyone can contribute their ideas, headquarters' supervision can be kept to a minimum.

Competition as a Business Strategy

We have vigorously pursued competition in order to achieve the four goals of the 1981 Carlucci Initiatives: reduced costs, a broadened industrial base, improved quality, and fairness. In the period 1982 to 1986 the annual value of competitively awarded Navy contract dollars increased from $8.1 billion to $23.2 billion. During FY 1987 the Navy competed 55.3 percent ($27.3 billion) of its procurement dollars. Our goal was 55 percent. Almost 90 percent of the individual contract actions were competed. The competitive dollar goal for FY 1988 is 53 percent, reflecting the awarding of contracts for two aircraft carriers in that year.



From FY 1983-1987, the Navy realized a savings of over seven billion dollars in its shipbuilding programs. Several factors combined to produce these savings, including lower inflation rates and program restructuring, but a conservative estimate is that one third of the savings was due to competition. These savings allowed us to buy significantly more forces and higher readiness levels for the same dollars spent. For instance, the Navy's



shipbuilding competition savings (about $2.5 billion) would be enough to buy three DDG-51 class Aegis destroyers or three SSN-688 class submarines.

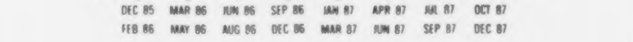
Competition's detractors argue that dual sourcing does not always equate to adequate competition, and that, in some circumstances, the non-recurring costs necessary to establish a second source have forced unit costs above that projected for a continued sole source buy. Although not all programs have demonstrated clear savings due to competition, on balance, our experience is that competition is saving money.

Opening up more procurement and support programs to competition and fostering an environment which invites contractor participation have enhanced mobilization capability by expanding the defense industrial base. For example, the Navy has thirteen ordnance systems in dual source production today compared to four ten years ago. This provides us with a significant wartime surge capability above that of the sole source environment and frequently results in reduced procurement costs. For example, the dual source Tomahawk missile (all-up-round) program procurement cost has decreased from $11.0 billion to $9.2 billion since submission of the President's FY 1986 budget.

To date there is no evidence that "low bidder mentality" has led to reduced quality. In fact, there are examples to the converse, where quality has improved after the advent of competition. One example is depot rejection rates for the Tomahawk cruise missile which greatly improved after a second source was established.

TOMAHAWK

ALL-UP-ROUND REJECTS REQUIRING DEPOT MAINTENANCE



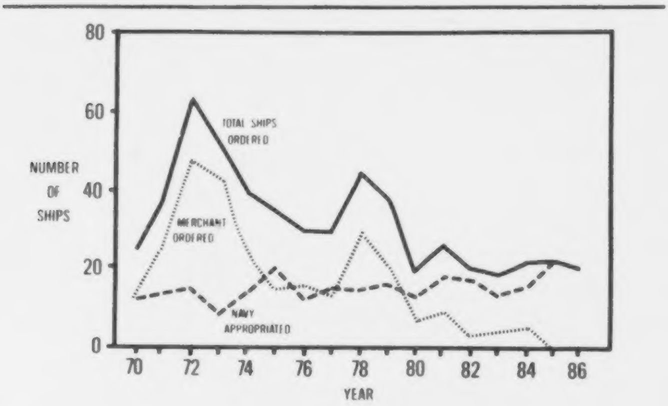
The Carlucci Initiatives' goal of fairness is the most difficult to address; however, the Navy, through its competition policy has significantly increased the opportunities for companies to obtain a share of Navy business. An increase in the percent of competitive actions from 30 percent to nearly 90 percent over the past five years is indicative of our intent to distribute fairly our business base.

Our policies do not promote competition just for competition's sake. In some circumstances, it is inappropriate. High entry costs to establish a second source, such as would be necessary to establish a second source for aircraft carrier construction, do not make sense. Competition may not make sense for programs which have matured to the point where competition would require the second firm to realize impossible production efficiencies to match the price of the original prime, and instances where a contractor finances the development of a unique system for limited production quantities do not justify competition .

The Navy's competition strategy is succeeding. We are meeting our goals as delineated in the Carlucci Initiatives; however, our business strategy was conceived with a very different level of resources in mind. We will continue to pursue our competition policy and through it increase our national industrial base. However, given the forecast of a severely constrained budget, maintenance of specific areas of our industrial base may require creative action on our part. An example of this problem is ship construction.

SHIPS ORDERED

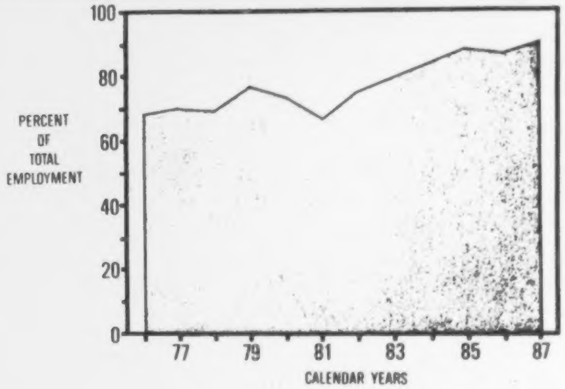
(1970 1986)



The shipbuilding industry, as well as some other defense related industries, is currently experiencing a reduction in workload. This is not a result of competition for Navy contracts, but the loss of the commercial market. While civilian orders for new ship construction have shrunk to zero in recent years, Navy shipbuilding competition has actually increased the number of shipyards engaged in new construction since 1981. The supplier base has responded well by lowering manufacturing lead times for important mechanical and electrical ship components and basic materials by 20 to 30 percent. Another way in which we are helping to maintain the shipbuilding industrial base is by opening up ship repair availabilities to competition between public and private shipyards. Since FY 1985 we have competed twenty-eight overhauls with a savings to date of $276.2 million. Navy ship construction and repair now provides ninety percent of private shipyard employment.

Our challenge in the next few years will be to maintain an adequate defense industrial base in the face of a severely constrained budget, not only within the Department of Navy or the Department of Defense, but for the entire nation. As the results of the President's Commission on Merchant Marine and Defense indicate, the invigoration of our commercial maritime industry is more than a Navy problem or a private sector problem. It is a national problem which must be addressed in the context of national defense and economic strategy.

ACTIVE SHIPBUILDING BASE
NAVY SHARE OF TOTAL PRIVATE SHIPYARD EMPLOYMENT



ACTION '88

Our unified improvement initiative, ACTION '88 (Attack Costs Through Improvements in Our Navy/Marine Corps), is promoting efficiencies and cost control throughout the Department of the Navy. ACTION '88 provides a coordinated approach to interrelated improvement programs including acquisition streamlining, value engineering, off-the-shelf procurement, productivity improvement, and upgraded specifications and standards.

The acquisition streamlining initiative is reducing procurement lead times, eliminating unnecessary requirements, and encouraging greater teamwork between government and contractors. Recent examples include the AOE-6 Fast Combat Support Ships and P-3C Update IV Avionics Suite programs. The AOE-6 class contract saved over $630 million from our FY 1987 five year shipbuilding plan. This streamlined approach has reduced current cost estimates for P-3C Update IV program by over $500 million. We are applying additional contractor incentives for reducing costs, including fixed price ceilings and shared savings through value engineering.

We have established a certification process in our major procurement commands, with executive level oversight from the Specification Control Advocate General and the Assistant Secretary of the Navy for Shipbuilding and Logistics. This process ensures that our acquisition programs are streamlined before proceeding into full scale engineering development, and includes a progressive process of certification of the acquisition plan, contract specification, and solicitation. During the past year, over one hundred programs have been through this process.

The marketplace is making a significant contribution in yet another area, the use of off-the-shelf designs, equipment and components. Before beginning a development effort, program managers now consider "non-developmental items" available to meet operational requirements. This reduces costs and delivery time. The LSD 41 Cargo Variant is an example of modifying an existing design to satisfy a new requirement. Off-the-shelf products include some of our most sophisticated weapons systems, such as components for the AN/BSY-1 Submarine Combat System and the E-6A TACAMO Aircraft. We are encouraging competitors for our contracts to propose alternative off-the-shelf solutions. We used this approach on the P-3C Update IV Avionic System.

The effort we launched several years ago to ensure that our specifications, standards, and drawings are up-to-date, technically correct and cost-effective is paying off. It has enhanced competition, saved time and effort, increased productivity and reduced contractor costs. Our approach includes an aggressive campaign to cancel, revise and consolidate existing military specifications, standards and drawings. During the past year we reviewed over 3,000 specifications and cancelled another 400. At one command alone we canceled over 500 unnecessary or outdated drawings. We consult with non-government standards associations and have established joint ventures to develop specifications and standards acceptable to the Department of the Navy and to industry. During FY 1987 we adopted 133 commercial specifications in place of military specifications. Many of our procurement contracts are based on commercial item descriptions and performance specifications instead of detailed military specifications. Our goal is to have specification documents that are the most cost-effective possible while satisfying our requirements for quality and performance.

Our value engineering program is a clear demonstration of our commitment to reducing costs. During FY 1987 savings were in excess of $1 billion. This is more than a 75 percent increase over FY 1986 savings. Much of this increase can be attributed to our stepped-up training efforts. Since 1985, over 5,000 government and contractor personnel have attended our value engineering course. Our acquisition streamlining training, initiated in 1986, is being accelerated. We expect to reach an additional 5,000 students in these two areas during FY 1988. We believe training is key to even more impressive results.

We believe our productivity improvements initiative to be unsurpassed by any in the federal government. Our goal is to surpass the President's challenge in 1986 to increase productivity 20 percent by 1992. A critical element -- top level support and commitment -- for achieving this goal was demonstrated by Admiral Trost, General Gray and myself when we committed ourselves to the six Navy Guiding Principles.

We believe that the our Total Performance/Productivity Improvement Plan embodies a comprehensive, practical approach to achieving sustained improvements. We are emphasizing cost control, with quality as an essential measure of effectiveness. We use the same techniques found in successful private companies. We have stepped-up efforts to improve productivity through smart capital investment. Employee action teams address a wide range of issues to improve performance, increasing participation and better using a significant resource. We have extended our Model Installations Program to cover all Navy and Marine Corps installations, resulting in the elimination of many self imposed and unnecessary rules and regulations. Our Manage to Payroll effort is an unqualified success. We eliminated 900 pages -- 54 percent -- of all civilian personnel "guidance." Twenty-one instructions were canceled entirely.

We are encouraging increased productivity through employee participation, incentives, and recognition programs to make our work force more competitive for ship overhauls and aircraft rework. Our goal is to have gain sharing programs in place in at least ten major activities before the end of FY 1988. Our first two activities--Charleston Naval Shipyard and Naval Aviation Depot Cherry Point--already have approved plans and are working under their guidelines. These gain sharing programs are the first activity-wide gain sharing programs ever attempted in the federal government and should provide a body of knowledge useful to other federal departments and agencies.

Research, development, Testing and Evaluation (RDT&E)

Today the U.S. Navy stands ready to "go in harm's way" as a result of many years of well managed acquisitions and investments in RDT&E. This investment, approximately 10 percent of the Navy's total budget request in FY 1989, is positively affecting operations every day as new and improved systems enter the Fleet.

We are taking our cues from industry as we implement business management practices similar to the commercial world. Through greater use of competition, fixed price contracts and contractor investment we are realizing improved performance, better quality products and reduced cost for the American taxpayer. Dual sourcing now starts in the development process and will pay off with production savings on programs such as the AN/BSY-2 Submarine Combat System.

Navy contractors benefit from higher allowable profits for fixed price development contracts than they can under a cost-type arrangement which has a statutory limit on fee. Our use of flexible fixed price arrangements -- fixed price incentive vice firm fixed price -- for low risk definitively negotiated full scale development contracts is being lauded by Navy program managers and their contractors.

An interesting phenomenon of the Navy-initiated policy of contractor investment in production tooling and test equipment is an overall decline in the total tooling/test equipment bill. Once we put the onus on the contractors' shoulders to make the up-front investment, senior contractor management became involved. In many cases, tooling and test equipment proposals have been reduced drastically, saving money in two ways: First, instead of making the up-front investment as we used to, we now reimburse the the contractor gradually over the life of the program. Second, the total cost we amortize has decreased substantially due to the reduction in the overall tooling bill made by industry executives.

It will take time to measure the exact benefits of this aquisition policy, but we are already seeing a payoff. We are seeing a smooth transition as we proceed from research and development to production, with more finite specifications and controlled costs. The Fleet will reap the real benefits as we shorten total acquisition time and are able to field more for our money.

Antisubmarine Warfare (ASW) Master Plan

The growing sophistication of the Soviet submarine force requires a carefully managed development and procurement program. Threat advances must be assessed and projected for the future, and the appropriate technical responses selected. These concepts must then be incorporated into the fleet hardware and put in the hands of operators in time to preserve our ASW capability. The Navy's blueprint for accomplishing this is the ASW Master Plan, first printed last year, and published in revised form this February.

ASW is not a platform mission but a Navy mission. Winning against the submarine of the future will rely more and more on the coordinated application of a wide variety of intelligence sources, sensors, platforms, and weapons. The "Lone Ranger" approach, possible for many years by virtue of our acoustic advantage, has become largely a thing of the past. This year's Master Plan clearly describes the role of each ASW unit -- aircraft, submarine, surface ship, and surveillance system -- and its importance to the ASW problem.

The Master Plan explains the importance of the ASW campaign to our maritime strategy, lays out our best estimate of the submarine threat, and then describes the systems which will be needed to execute our strategy today and in the future against this threat.

Shore Facilities

The Navy's shore facilities continue to deteriorate, thus detracting from improvements being made in the readiness of fleet operating forces. A Shore Facilities Life Extension Program was initiated last year to reverse this trend by targeting military construction and maintenance funding in high priority support facilities with a goal of eliminating all major degradations by 1994. Unfortunately, FY 1988 was the fourth consecutive year that our Navy military construction request was reduced 20 percent by Congress. This trend has seriously impeded efforts to improve the deteriorated facilities that hamper overall combat readiness. Notwithstanding Congress' consistently large reductions to the Military Construction Program, we will forego other procurement items again this year to submit a shore facilities budget request with an increase of 10 percent over last year's funding in order to reverse this trend. This increase has been made while the total Department of Navy budget request for FY 1989 has been reduced sharply to conform to deficit reduction goals. The military construction segment of our budget request is the absolute minimum needed for our facilities upgrade plan. We cannot maintain required readiness posture, protect existing assets, and take care of our people properly without the full support of Congress for the Navy's military construction program.

VI. CONCLUSION

America's sea services, forward deployed in areas of vital interest, serve as an active expression of national resolve to maintain our access and ties to friends and allies and to dissuade our adversaries. The most cost-effective, least vulnerable element of our strategic deterrent posture -- the ballistic missile submarine force -- will increase in importance as we enter into potentially historic strategic arms agreements with the Soviet Union. American seapower's contribution to deterrence throughout the spectrum of violence will continue to enhance our ability to negotiate agreements that advance America's interests.

Regional challenges, areas of unrest and low-level conflict will continue to require that the Navy and Marine Corps remain ready for any national tasking. Our ability to concentrate powerful naval forces quickly in response to emergent crises, and yet to just as quickly redeploy them, means that the sea services will remain a primary military instrument of foreign policy in this era of "violent peace", and a key contributor to victory in the event of war.

The past seven years have seen a resurgence in America's sea services, thanks to the Administration's Naval Recovery Program and to the support of Congress. A fleet that had shrunk to 479 ships has now been nearly rebuilt. Our people are exceptionally dedicated and immensely talented. These magnificent improvements could be sadly and all too easily squandered if the rush to reduce the fiscal deficit is permitted to affect national security by suppressing the defense budget. Delay and deferral of ship, aircraft and material acquisition can create another kind of deficit, faced by our children in terms of an increasingly unreliable deterrent and block obsolescence of our weapons. While strong national defense has never been inexpensive, far more costly and incalculably painful are the lives and resources

forever lost to the war which untoward weakness invites. In an address delivered in 1897 to the Naval War College, Theodore Roosevelt said, "Again and again we have owed peace to the fact that we were prepared for war." Ninety years later the wisdom of those remarks is more apparent than ever.

The continued support of the Congress and American people, coupled with the dedicated and courageous professionalism of the men and women of the sea services, guarantee that the Navy and Marine Corps team will continue to serve this nation well and faithfully, preserving the ideals of this nation we most cherish.

BIOGRAPHY OF HENRY LAWRENCE GARRETT, III

On 19 May 1987, President Reagan nominated H. Lawrence Garrett, III, to be the Under Secretary of the Navy. Mr. Garrett was confirmed by the Senate on 5 August 1987 and took the oath of office on 6 August 1987, becoming the twenty-fourth Under Secretary of the Navy.

Mr. Garrett was born 24 June 1939 in Washington, D.C., and was raised in Miami, Florida. He enlisted in the United States Navy in October 1961 and subsequently became qualified in submarines as a machinist mate. Mr. Garrett was commissioned in April 1964 upon completion of flight training, serving as a Naval Flight Officer aboard maritime patrol aircraft. He served operational tours in VP-50 with deployments to Viet-Nam.

In 1972 he transferred to the Judge Advocate General's Corps, where he rose to the rank of Commander. He served from 1974 to 1978 as Force Judge Advocate/Legal Advisor to the Commander, Submarine Force, U.S. Pacific Fleet, Pearl Harbor, Hawaii. In January 1979, while serving in the Office of Civil Law in the Washington, D.C., Office of the JAG, he was detailed to assist in developing the Federal regulations pertaining to the Ethics in Government Act of 1978. In February 1981, he was detailed to the White House as Assistant Counsel in the Office of Counsel to the President. He retired from the Navy in 1981.

Subsequently, Mr. Garrett was Executive Assistant to the President and Chief Operating Officer of the U.S. Synthetic Fuels Corporation. He subsequently served as Regional Director of the Seattle Regional Office of the U.S. Merit Systems Protection Board. In 1983 he returned to the White House as Associate Counsel to the President of the United States, where he served until February 1986.

Prior to his appointment as Under Secretary of the Navy, Mr. Garrett served as General Counsel of the Department of Defense from February 1986 to August 1987.

Mr. Garrett attended the University of Miami, Coral Gables, Florida, where he studied Industrial Engineering. He received a B.S. degree in Business Management from the University of West Florida in Pensacola, and received his J.D. degree from the University of San Diego School of Law, San Diego, California, graduating cum laude.

A member of the California and District of Columbia Bars, he is licensed to practice before the United States Supreme Court, the Supreme Court of California, the District of Columbia Court of Appeals, U.S. Court of Military Appeals, and the U.S. District Court for the Southern District of California.

CHIEF OF NAVAL OPERATIONS

STATEMENT OF ADMIRAL C.A.H. TROST, CHIEF OF NAVAL OPERATIONS

OVERVIEW OF NAVY STATUS

Senator JOHNSTON. Admiral Trost.

Admiral TROST. Thank you, Mr. Chairman. I appreciate the opportunity to appear before the committee. I would like to give a brief overview of where I see the Navy today, where I see it going, and to express to you as members of the Congress some of my concerns for the future.

As Under Secretary Garrett has stated, our Navy today is strong, and we feel it is more ready than ever to fulfill the Nation's commitments and to support our long-standing national security strategy of deterrence for defense and Alliance solidarity.

As you know, our Navy is at sea in ships and aircraft throughout the world day in and day out, meeting both those presence requirements for foreign forces on the world's oceans and also contributing to our ability to control crises around the world.

PERSIAN GULF

The focus of attention in these past months has, of course, been on the Persian Gulf. Military operations in the Gulf region are but the most recent confirmation that a maritime superpower such as ours, faced with a wide range of global interests and an increasing shortage of overseas basing opportunities must, for force, look to its Navy to execute national security policy both in peacetime and to be its cutting edge in conflict. It is neither exceptional nor should it be surprising that 97 percent of all U.S. servicemen in the Middle East today are aboard ship. We have established effective minesweeping, convoy, escort and freedom of navigation operations in the region as well as a credible air and power projection capability to hold in check attempts by regional belligerents to expand the scope of hostilities.

Equally important, while substantial naval forces were in place and operating on both sides of the Strait of Hormuz, routine naval operations were also being conducted around the globe. Every operation, from strategic deterrence to drug interdiction, had a real world purpose, with most directly supporting vital diplomatic objectives.

USS MIDWAY DEPLOYMENT

As an example, USS *Midway*, a front-line, fully capable aircraft carrier with a full complement of modern combat aircraft, completed a demanding 4-month deployment to the North Arabian Sea this past winter, performing admirably throughout. During that Indian Ocean deployment, she made just one port visit of only 5 days duration. She is at sea again today, and when she arrives in her homeport of Yokosuka, Japan she and her crew will have been underway an astonishing 226 days during the preceding year.

Midway has been homeported in the Western Pacific since 1973 and is a highly visible and cost effective symbol of U.S. resolve and commitment in the Pacific. In addition, her permanent and geostrategically valuable presence provides a high degree of warfighting leverage in an area critical to U.S. security interests. Due to her forward basing and the contributions to her upkeep from the government of Japan, *Midway* is the least expensive aircraft carrier we maintain. To retire *Midway* for short-term savings, as some have suggested, would be, in my view, a tragic mistake. In fact, the cost of decommissioning and laying up the ship would be over $150 million, and returning the crew and air wing to the United States would cost another $12 million.

The Joint Chiefs of Staff and the Unified Combatant Commanders have repeatedly validated an aircraft carrier requirement exceeding 20 carriers. 15 deployable carriers are the minimum required to provide a reasonable assurance of success in sequential wartime operations and a balanced force structure that takes into account geographic reality, alliance commitments and national dependencies. Accordingly, *Midway* must be maintained through her scheduled decommissioning date in 1997 in order to sustain our carrier force at an appropriate level for the global situation we face today and to contend with tomorrow's national security taskings.

ACTIVITIES OF NAVAL FORCES

The activities of our naval forces over the past year point out vividly that there is no substitute in today's world for the flexibility, mobility and capabilities of today's Navy. As overseas base access continues to contract in the future, I would expect even greater demands on these relatively self-sufficient forces.

I should note that the U.S. Navy is not a go-it-alone organization. Far from it. To the extent the presence of other branches of the armed forces permits, we are on a continuing and regular basis conducting joint and cooperative operations wherever possible.

PEOPLE PROGRAMS

The real strength of the Navy and the very heart of our competitive advantage over potential adversaries and the key to the successes that the Navy has enjoyed are our Navy men and women. We as a nation have provided them the finest ships and aircraft, support and logistics, and training and education that can be found in the world; but it is they, these superb Navy men and women, who make the difference. More than anything else, they know what they are doing and why they are there, intuititively understanding, as they do, the importance of sea power and their role therein.

In the Soviet Navy, each ship carries at least one political officer to indoctrinate the crew with the proper Communist ideology. Our sailors do not need that because they understand their role in all its importance, and they ask only that they be given the resources to succeed at their demanding job. They are the main source of the tremendous feeling of confidence that I have about our present maritime capabilities. They are also my primary concern for the future, because I see being set into motion an erosion of support for a capable Navy, particularly in the personnel area, that will inevitably have serious consequences for the future of U.S. seapower.

For a given number of commitments, a given number of ships is necessary to permit recovery by both machines and people from the environmental and personnel stresses of extended deployments and to permit proper preparation and training for the next deployment. If the number of ships drops too low for the commitments, readiness falls and retention lags. By the same token, for a given number of ships a certain end strength, both officer and enlisted, is required, or the same results accrue.

National interests and responsibilities will continue to require timely responsive and positive action by NATO forces. The Navy does not establish these national commitments, but it does provide the force that has historically been relied upon to meet them.

In fact, authoritative estimates of the changing global security environment forecast increasing demands for precisely the kind of mobile flexible forces that for practical and political reasons can only be provided by our Navy.

What is most frustrating about the prospect of declining congressional budgetary support for the kind of Navy that world realities demand is that we have seen it all before and not that long ago.

DEFENSE STATUS IN 1980

In 1980 and 1981, after 10 years of declining budgets, both the number of ships and the number of personnel became critically low, and a vicious cycle ensued: too many commitments, too few ships, too much underway time, too much work, too much inoperative equipment, too little satisfaction, too little pay, too few reenlistments and, therefore, too much work for those who remained. The bottom line was ships that were not ready for deployment, commitments that were not covered or were covered inadequately, and a dangerously thin margin of confidence that we could keep the sea lanes open in time of conflict.

Those times have been etched in the minds of our experienced officers and senior petty officers: a myriad of problems reflected discredit on the world's number one maritime power—ships that could not get underway, planes that could not fly because of a lack of spare parts, poorly trained people, serious discipline and morale problems, horrendous retention rates. It was an abysmal period which none of us would want to see repeated. As our Master Chief Petty Officer of the Navy recently testified, retention over the past 2 years is down after 5 years of steady increases, and sailors see a downward trend in the quality of life programs as actions occur over which they feel the armed forces have little or no control. We have improved our Drug Education Program, created family service centers to care for our families, assisted spousal employment, and provided day care, all actions supported by the Congress. Yet, if fair compensation is lacking, if selective reenlistment bonuses become too variable and unpredictable for career planning, we will see an accelerated loss of our best, most highly trained people to competing industry. Then the ships and aircraft and submarines in which we have invested will decline in readiness as they did in the past simply for lack of adequate manpower to maintain them. We have been down that road in the past, and we should be careful that we do not, through inadvertence start down it again, for it was indeed a sad time for the Navy.

SUPPORT OF 4.3 PERCENT PAY RAISE

Nothing is more important to me than the recruitment and retention of quality people, and in this regard I, too, add my very, very strong support to the 4.3 percent pay raise. We already face, as Under Secretary Garrett has noted, a gap between civilian and military pay, a disparity that threatens to undermine our best efforts to attract and satisfy first-rate people, my top priority.

Now, we have been asked in the past, can we not get by with less? Especially since we are as good as we are now, why not tighten our belts? Well, we have been. The decisions that are taken today affect not just tomorrow but the day after tomorrow. We are talking about future readiness as well. Historical examples tell us that after every rebuilding program, there has followed a major reduction in funding which allowed all the gains to be scattered to the winds. These examples also tell us that the damage at first was imperceptible but that years later, when the Nation awakened to its plight, the costs of restoration were nearly prohibitive. I think we are on the verge of such a cycle again now. Should we fail to protect our investment in people, equipment and readiness, we cannot deceive ourselves about the inevitable consequences.

AFFORDABILITY OF STRONG NAVY

Many ask is an effective Navy affordable? Some claim that our recovery of defense strength over the last 7 years has impoverished this Nation and has created the budget deficit that so concerns all of us. That is a simple explanation and it is attractive, but it is not true. In the past 20 years, we have seen that for every dollar of increase in defense spending, we have in fact increased other government programs by $7. Indeed, the defense share of the gross national product, now about 6 percent, is lower than at any time since Vietnam. We can compare that to the last year in which this country had a balanced budget, 1969, when defense spending accounted for more than 9 percent of gross national product.

I think the bottom line is simple. A strong national defense and an effective Navy are affordable. We cannot lose sight of the fact that threats to our national security are not limited by our fiscal problems, nor, might I add, are they ameliorated in any sense by the statements of foreign leaders. It is vitally important to bear in mind that every American is a direct recipient of what the defense dollar buys: the protection of a freedom unequaled anywhere else in the world, freedom that we would all immediately point to as the most precious aspect of our national culture and heritage.

CONCLUDING REMARKS

In summary, Mr. Chairman, the Navy has managed to remain on course with sails trimmed for the last several years, but if austerity promotes efficiency, that efficiency has limits. In my view, we are fast approaching them. Our programs are driven by the real world threat and by our peacetime commitments. We are not going to deploy a hollow Navy. The force that we have must continue to be capable, and it is clear that our ability to sustain the capability of the fleet over the long term will require modest but steady program growth from the Congress. This was equally clear when the decisions were taken together by the administration and the Congress to rebuild our fleet in the first place. Now that the rebuilding is nearly complete, I would urge that you support reasonable, real, stable program growth required to keep your Navy ready to support and defend American interests on the world's oceans in peacetime or in war. It is a responsibility that the Congress simply cannot ignore. We must not permit a wise foresighted investment to be wasted as we work together to meet the challenge of maintaining a strong defense in a fiscally constrained environment.

Thank you, Mr. Chairman. I will stand by for your questions.

[The prepared statement of Admiral Trost follows:]

A REPORT BY ADMIRAL C.A.H. TROST
CHIEF OF NAVAL OPERATIONS

INTRODUCTION

Mr. Chairman, I am very proud to appear before you and the distinguished members of this committee to represent the United States Navy. My statement this year focuses on the work of today's Navy in daily real-world operations that directly support national security interests around the world, on the question of the continued affordability of such an effective Navy, and on my priorities for the Fiscal Year 1989 Budget. Highlights of the Navy's budget request are attached as an appendix to this statement.

TODAY'S NAVY

The Navy today is more ready than ever to fulfill the Nation's commitments and to support our long-standing national security strategy of deterrence, forward defense and alliance solidarity. Navy men and women are at sea in ships and aircraft throughout the world, day-in and day-out, every day of the year, communicating impressive military strength and practiced capability to friends and allies as well as to potential adversaries. The distributed presence of those deployed forces -- forward -- on the world's oceans and in waters adjacent to friends, allies and the Soviet Union, gives tangible evidence that the United States remains committed to freedom of the seas and is able to protect that freedom in ocean areas vital to its national interests.

The American imperative for maritime power begins as a fundamental requirement for an island nation, dependent on world commerce, to have free use of the world's oceans. It is compounded by the emergence of the United States as a world power, with worldwide interests and alliance commitments to nations which are themselves islands or located in strategically exposed positions. To such a nation and such an alliance, freedom of the seas is a prerequisite for economic and political survival.

The insistent realities of Soviet power require a sustained emphasis on national defense and maritime superiority. The Soviet Union continues to expand its ability to threaten U.S. allies and our extended security through an inexorable growth in military capability, particularly an increasingly capable, globally-positioned Navy. When the world's predominant land power continues to develop an impressive maritime capability, able to contest control of an expanding portion of the world's oceans, we, as an island nation and leader of a maritime coalition, must be concerned and responsive.

In addressing the Soviet threat, the notion of "competitive strategies" has long been a part of the Navy's philosophy. Our maritime strategy for employment of a strong and effective Navy exploits Soviet weaknesses. It strengthens deterrence by forcing the Soviet Union to face a most unpalatable and deterring prospect: that any conventional war they initiate with the West could be protracted, global and fought by a unified maritime alliance in places and ways not of their choosing. Our forward posture is the most strategically sound concept to ensure that our allies have tangible support, our lines of reinforcement and resupply are not challenged, our own coasts are not threatened, and technological advantages are best exploited. It allows the full weight of Western capability to face the Soviets and removes their preferred option of a short, single front war. The concepts of employment embodied in the maritime strategy fully support the national military strategy. They do not reflect the assertion that the Navy wants to go it alone, or that the Navy has adopted a forward strategy as a rationalization for a large Navy; they do reflect the realities of our global interests and the threat to those interests.

The Soviet Union is our primary adversary; however, we believe the strength of our deterrent capabilities has made global war against that adversary an unlikely possibility. To preserve the effect of that deterrent, we must be fully prepared to fight such a war. In addition -- and of increasing concern -- international violence remains at high levels in the forms of terrorism, political crises and regional conflicts. Our national leadership has called on the Navy to enforce U.S. national security interests more than 200 times since the end of World War II. Naval forces have been the "force of choice" because they enjoy the unique advantage of being able to signal commitment and intent -- and if necessary, menace -- without violating other nations' sovereignty, and once the need is past, depart without signaling retreat.

The focus of attention on U.S. military activity over this past year has been on the Persian Gulf. Military operations in the Gulf region are but the most recent confirmation that a maritime superpower faced with a wide range of global interests and a shortage of overseas basing opportunities must look to its Navy to execute national security policy in peacetime and to be its cutting edge in conflict. It is neither exceptional nor surprising that 97 percent of all U.S. servicemen in the Middle East are aboard ships. The Navy has established effective minesweeping, convoy, escort and freedom of navigation operations in the region as well as a credible air and power projection capability to hold in check attempts by regional belligerents to expand the scope of hostilities. These successful operations have not required basing rights or the acquiescence of friends or allies to put our forces in place. Equally important, while substantial naval forces were in place and operating on both sides of the Strait of Hormuz, routine naval operations were also conducted around the globe -- from the Arctic to Antarctica -- off Northern Europe, the Soviet Far East, South America, West Africa, Southeast Asia, and Central America -- in the Mediterranean Sea, the Black Sea, throughout the Caribbean and Micronesia. Every operation, from strategic deterrence to drug interdiction, had a real world purpose, with most directly supporting vital diplomatic objectives.

These activities point out vividly that there is no substitute in today's world for the flexibility, mobility and capabilities of today's Navy. As overseas base access continues to contract in the future, I expect even greater demands on these relatively self-sufficient forces.

I attribute the sound state of the Navy today to a well considered rebuilding program over the last decade and to our greatest resource---the Navy man and woman.

Improvements in readiness and sustainability have been the most dramatic product of the recent defense revitalization, even though force structure increases seem to receive the greatest attention. For example, the time that surface ships are free of debilitating material casualties has improved 61 percent, and aircraft full mission capable rates improved by 66 percent, from 1981 to 1987. During that same period, overall ship readiness increased 125 percent and overall aircraft squadron readiness increased an impressive 264 percent.

As for our people, their unparalleled performance has been the keystone of the Navy's success. Career professionals, together with young men and women fresh out of high school, demonstrate a standard of character that far exceeds the norm of American society. These Navy personnel routinely evince a selfless dedication to service and strength of character which enables them to meet the challenging requirements of national commitment, including extended at-sea periods, the stress of high risk assignments and duty as representatives of the United States overseas. They have my admiration and complete support.

CAN WE AFFORD AN EFFECTIVE NAVY?

The answer to the question of whether we can afford an effective Navy is simple: we can.

The imperatives of the requirement to reduce the federal deficit are universally understood. A strong economy is an important element in a strong national security posture; and we in the military appreciate the importance of social and other domestic programs---particularly education. However, the irreducible need for a strong defense is agreed to by all responsible Americans as the bedrock upon which our ability to support other national programs rests.

So much rhetoric has been advanced in the name of cutting the defense budget to redress the federal deficit that the real facts about the relationship between the defense budget and the federal deficit have been obscured. Many people, even some who are ostensibly well-informed, have accepted the argument that defense spending in this decade has all but bankrupted the Treasury, and that the Navy has absorbed far too much of the defense appropriation to build a 600 ship fleet. Regretfully, those arguments have been so widely advanced that assertions to the contrary are now greeted with ridicule.

But the facts, if viewed without emotion, tell another story. They indicate that we can afford a strong defense and that if a service's budgets were to be determined based on utility in the real world, the Navy budget should be allowed the moderate growth necessary over the long-term to sustain an effective Navy.

The most common method of determining a nation's commitment to its defenses is the proportion of its gross national product devoted to defense spending. Today, the U.S. defense budget is about 6.0 percent of the GNP. In 1969, the last year of a balanced budget, defense spending accounted for nearly 9 percent of the GNP. During the past 20 years, the period over which most of our national deficit was amassed, there was a 7 dollar increase in non-defense programs for every 1 dollar of growth realized in the defense budget. Given these facts, it is difficult to support an argument that the recovery of our defense strength in this decade is responsible for the budget deficit.

While the investment in capital required to rebuild the Navy has been considerable, the Navy's share of the defense budget before and during the period of the buildup, far from increasing as some critics have contended, has remained essentially steady. That fact, in combination with the central reality that the Navy has continued, year-in and year-out, to carry a major part of the burden of national security commitments in forward areas, would indicate that continued Congressional support of an effective Navy is a sound investment.

At the beginning of this decade, the administration and Congress made a significant commitment to support a well thought out and strategically sound building plan, designed to meet the military threat of the Free World's major adversary. The military capability represented by the currently funded Navy force level -- a balanced, ready and modern force centered on 15 aircraft carrier battlegroups, 4 battleship battle groups, 100 attack submarines, and adequate amphibious and support forces --is the minimum capability necessary to meet the threat. It comprises the best possible mix of offensive and defensive naval forces ever assembled. In building that military capability, the American people, through Congressional action, amassed a significant capital investment in a strengthened and ready Navy. Yet, historical examples show us that after every successful rebuilding program, there has followed a major reduction in funding which would not sustain the readiness attained by that effort. Recoupment from these retrenchment periods, unfortunately, required even greater expenditures. The costs of resuscitating a declining Navy only nine years ago should give sufficient pause to consider the consequences of allowing such a decline ever to occur again. Should we fail to protect our investment in people, equipment and readiness, the results may not be immediately apparent; but we should not deceive ourselves about the inevitable consequences. National interests, responsibilities and tasking will continue to require timely, responsive and positive action by ready Navy forces. The Navy does not establish these national commitments, but as has been noted previously, it is the force that has been historically relied upon to meet them. A lack of sufficient funding to sustain a ready Navy will impact on our ability to meet such taskings and properly support national interests.

With diminishing Congresional support of the recent defense recovery, the ability of the Navy to sustain or afford a balanced, ready, and modern force is being increasingly questioned by defense critics. Given that Navy force levels currently funded represent the minimum capability based on military requirements that is necessary if we are to meet the wartime threat, and given that the Navy is to do the "peacetime" job that is asked of it -- and has been repeatedly asked of it over time -- the Navy must be made affordable.

Simply put, if we want a credible and effective way to continue to be able to operate across the entire spectrum of conflict, from violent peace -- as we are today -- to war, it is our shared responsibility to make the measured intelligent choices that will provide the support necessary to maintain the value of the investment that the Nation, through Congress, has made in an effective Navy.

In the long-term, a prudent and minimal level of real program growth is required to support the capability attendant to an effective Navy. In the short-term, negative growth for four of the last six years has been overcome through continued innovative approaches and efficiencies. We are fast reaching the limits of those techniques. Long-term zero or negative growth will result in retrenchment leading to a smaller Navy with diminished capacity to support the national strategy in peace or war. In such a clearly undesirable eventuality, we would have to reconsider our national security objectives and forward military strategy or find another, and heretofore elusive, way to protect our forward interests.

The Navy's overall annual growth rate from 1980 to 1989 is 3.1 percent; included in that figure are the levels of capital investment necessary to restore the depleted condition of our maritime forces. And despite what some defense critics might assert, the Navy has achieved balanced growth over the period. Force structure has seen the lowest annual growth over the period (1.6 percent), a rate virtually half of overall growth; sustainability grew at an annual rate of over 5.7 percent and peacetime ordnance levels have never been higher. In fact, the Navy has had less real program growth during the 1980-89 Defense recovery than the other services:

COMPARISON OF REAL PROGRAM GROWTH AND SHARE OF DOD RESOURCES

(FY 80-89)

	Annual Real Program Growth	Change in share of DOD Resources
Army	3.3%	+.6%
Air Force	4.8%	+2.1%
Navy	3.1%	-3.1%

With this lower growth rate, we are still proceeding toward our goal of a 600 ship Navy and will have fielded well over one-half of DOD's new systems in the eighties. Notably, the money invested in the Navy has gone directly into warfighting capability to meet our national military requirements.

With the buildup to minimum required force levels essentially behind us, the Navy has shifted to a sustaining mode, with a greater share of resources programmed for readiness and sustainability for the next five years than for the last five. We plan to maintain capability and current high levels of readiness, while continuing to improve sustainability levels. To accomplish this dual path will require some real growth over the long-term. Studies have identified a desirable range of 1.4 to 3 percent annual long-term real program growth to sustain the Navy that has been built. Those figures are in line with the average of 2.5 percent per year the Navy's budget has grown since World War II. Over the same period, GNP has grown roughly 3 percent per year on average. Whatever the required number, it is clear that a minimal and prudent level of real growth is required to support the capability represented by a thoughtfully designed and effective Navy while pacing the threat over the long term.

As I have noted earlier, in four of the last six years, the Navy has suffered declines in program growth. In this austere environment, we have managed not only to keep our shipbuilding goals on target but to maintain the readiness levels of our forces and to vastly improve their sustainability. By any historical standard, our ships and aircraft are battle ready for sustained conflict. Our ammunition bins average nearly 100 percent more ordnance than just 5 years ago, and our sailors are confident that they can use their weapons to fight and win. These accomplishments have been achieved through innovative business strategies as well as management economies including competitive contracting, organizational streamlining, and strict controls to eliminate goldplating. We operate the fleet more efficiently today with expanded use of shore-based trainers and stricter requirements governing the operating schedules of fleets. These efficiencies have been largely implemented; further efforts in these areas, though still being aggressively pursued, are producing diminishing returns.

In summary, the Navy has managed to remain on course with our sails trimmed for several years; but there is a limit to our ability to continue on that tack. We are not going to field a "hollow" Navy. The balanced fleet that you have built is the right fleet for our national strategy. It is clear that our ability to sustain that fleet's capability over the long-term will require a reasonable level of sustained real program growth from the Congress. When key decisions were made to rebuild the fleet, Congressional support was present and necessary. Now that the rebuilding effort is largely complete, I urge you to support the reasonable growth required to keep your magnificent Navy ready to fully support and defend U.S. interests on the world's oceans -- in peace and war. We must not permit the value of a wise and foresighted investment to diminish as we work together to meet the challenge of maintaining a strong defense in a constrained fiscal environment.

BUDGETARY PRIORITIES

The FY 1989 budget requests the minimum level of resources necessary to maintain the Navy's momentum. It reflects two overriding priorities:

o Safeguarding total Navy capability, readiness and performance.

o Ensuring that we continue to attract and retain those quality people so necessary to our continuing success.

There is nothing more critical to the state of the Navy than the recruitment and retention of quality people. Their superb dedication and matchless character are on display, underway and ashore, every day. My top budgetary priority reflects the need for adequate enlisted and officer end-strength, fair pay and benefits, a judiciously applied selective re-enlistment bonus, sufficient PCS funds, aggressive recruiting programs, and a reasonable quality of life for our people.

For several years, end-strength was not allowed to increase commensurate with force structure growth. We have mortgaged the shore and support establishment to keep our fleet fully manned. Continued failure to provide the necessary manpower to effectively man, operate and support the Fleet will inevitably result in adverse impact on the sea-shore rotation of our sailors, a majority of whom now can expect to spend more than 55 percent of their Navy careers on sea duty -- a percentage growing annually. A separate but related issue is the adequacy of PCS funds. Without an appropriate level of PCS funding, an adverse impact on tour lengths, and thus on sea-shore rotation, is likely. The consequence of an increasingly arduous sea-shore rotation pattern and lack of PCS funds may well be, as it has been in the past, a delayed deleterious impact on retention.

Even more critically, an already lean officer corps, just beginning to recover from the ravages of the 1970s, is simply unable to absorb reductions coincident with the growth in afloat operational billets. Sustained, reasonable levels of Navy officer end-strength are essential if we are to maintain the readiness and capabilities of our operating forces. One warfare mission area of vital importance, in which the challenge of the future is particularly intense, is ASW. The Soviet submarine force now includes several classes of nuclear submarines incorporating major gains in acoustic quieting and combat systems sophistication. Continued advances in the quality of that force lead me to rank ASW as my central warfighting concern. The U.S. lead in ASW is substantial, but narrowing more rapidly than earlier estimates. We must give increased priority to programs which improve our ability to detect and successfully prosecute a more sophisticated adversary.

The physical condition of the Navy's shore support facilities has deteriorated as a result of budget and funding constraints thus resulting in lower shore support facility readiness and declining support for a more sophisticated fleet. We can no longer afford to defer replacement and maintenance of essential support facilities. Similarly, we must replace aging family housing, particularly for junior enlisted personnel stationed in high cost areas. I urge you to consider most carefully what we must do to correct the existing critical backlog of building construction and renovation, crucial to train personnel, sustain reasonable quality of life, and support fleet readiness.

The outlay character of research and development funding has made that area particularly vulnerable to significant budgetary cuts over the past several years. I am concerned, given the imperative that we maintain our competitive technological advantage, that we not mortgage the future for fiscal expediency. We must preserve fiscal support for fundamental research and the development of those enabling technologies with the greatest promise for future leverage.

APPENDIX I

MAINTAINING THE EDGE: FY 89 NAVY BUDGET REQUEST

International realities and the fundamental requirements of U.S. national security strategy demand a consistent commitment to maritime power. The nation's investment in its Navy over the past few years has demonstrably strengthened our maritime posture and produced concrete improvements in all aspects of naval capabilities. The American people have gotten their money's worth in a Navy that is ready and able to respond promptly and professionally, in conflict, crisis, or peace.

Because the state of the Navy today is sound, we can sustain recent accomplishments and meet future challenges with very modest growth. The Navy budget, I believe, requests the minimum level of resources necessary to maintain our momentum and meet those challenges.

The Navy budget requests a Total Obligational Authority of $87.6 billion for FY 89, representing a decline of 9.5 percent in real terms from FY 88 appropriations. This budget reflects my two overriding priorities: safeguarding material gains in total naval capability, readiness, and performance; and as the most important factor in this, ensuring that we continue to attract and retain those quality people so necessary to our continuing Success. Consequently, the budget stresses readiness and sustainability, although as Figure 1 shows, we continue to strike an appropriate balance among all four pillars of naval capability.

Readiness funding comprises 56.7 percent of TOA, reflecting our commitment to provide a force able to respond promptly and effectively to national needs despite tight budgets. Sustainability, at 8.6 percent of TOA, has shown the most growth since 1980 of all the pillars, and reflects our determination to support operational commanders' requirements for adequate numbers and quality of weapons and other material. Requested modernization funding, at nearly 17.5 percent of TOA, is sufficient to achieve a balanced program of systems and hardware improvements. Lastly, force structure funding continues to decline as a percentage of TOA as reflected in Figure 2. We have made considerable progress in recovering from the force structure deficit of the late seventies, and the force structure pillar's 17.2 percent share of TOA reflects an ability to sustain force levels with a modest investment.

Readiness

Readiness funding includes the costs of training, operating, and manning naval forces to carry out their assigned missions. It encompasses military personnel and their salaries, fuel, maintenance and repair for ships and aircraft, training costs, spare parts and other support items. In short, readiness is the day-to-day cost of operating the Navy.

Approximately one-third of this request is for military personnel. I place my highest priority on programs that support people -- our most perishable asset. The Navy's growth in ships and aircraft has already placed a strain on our available manpower. Large numbers of good sailors must be recruited and retained in an ever more competitive environment. This budget emphasizes the importance of proper manning and the stability of our benefit program as essential to the sustenance of maritime power. Although current fiscal constraints have forced us to accept zero growth in this budget, over the long term, measured and minimal growth in Navy end-strength is essential if we are to maintain the readiness and capabilities of our operating forces.

Officer manning in the 600 ship Navy is at the very heart of our capabilities. Without sufficient numbers of first-rate officers, we cannot effectively operate our ships and aircraft. We are a lean, well managed force. The Department of the Navy officer-to-enlisted ratios are the lowest in the Department of Defense. We have long since trimmed the fat from our officer manning. The Navy has consistently planned for growth in the officer corps in 1987-1989, in order to man the ships scheduled to enter the fleet during that time. To mandate any further cuts in Navy officer end strength will destabilize the Fleet and ultimately jeopardize the substantial national investment we have all made in a capable 600 ship Navy.

We face a declining pool of eligible and qualified young people from which to recruit, a result of extraordinary competition in the recruiting market -- from colleges and universities as well as other services -- and a declining propensity among eligible youths to serve in the Navy. The recruiting and advertising budget in our request is especially critical if we are to keep pace with the changing market of eligible manpower.

Retention is of equal importance to recruiting in keeping the current amount of experience in our manning structure. In this regard the Selected Reenlistment Bonus (SRB) program has resulted in excellent recent improvements in some critically short areas. The retention of enlisted supervisors serving in nuclear power surface ships improved from 35 percent in 1982 to 54 percent in mid-1987 as a direct result of Congressional approval to lift the ceiling on SRB payments for critically short ratings. However, gaps in SRB funding can still jeopardize our excellent progress in retaining experienced sailors serving within critical sea-going ratings. Last October, for example, average retention in certain specialists dropped from a norm of 40 percent to about 10 percent when SRB funding was cut off between approved budgets. SRB remains a critical retention tool.

The Navy's most serious officer shortages are in nuclear-propulsion qualified officers and mid-grade aviators.

Today we have a 20 percent shortage of experienced nuclear-trained officers in the grades of lieutenant commander through captain. These officers are required as commanding officers, executive officers, and department heads at sea as well as for key fleet support billets ashore. For the second consecutive year, submarine officer retention is down. The surface nuclear-qualified officer community faces serious projected shortages. Enhancements to Nuclear Officer Incentive Pay enacted in FY 86 will enable us to increase the pool of nuclear-trained junior officers, and we have requested a two year extension of that vital program.

Due to competition with a strong civilian marketplace, the shortage in junior aviators is now in excess of 1,000 pilots. To date, this shortage has been managed by monitoring officer distribution closely, but it is being felt in shore billets and is beginning to impact negatively on the personal and career needs of individual aviators. Aviation Officer Continuation Pay (AOCP) provided increased compensation and achieved a strong response when introduced in 1981. In FY 87, only half of those eligible accepted an AOCP contract, due in part to a steady decrease in its net value. To avoid unacceptably high loss rates of experienced aviators, AOCP needs to remain as an effective primary compensation tool.

Another key to the retention of a superbly trained cadre of professional Navy men and women is our wide variety of quality-of-life programs. These include active health and physical fitness training, "zero tolerance" for drug abuse, the personnel excellence program with its many educational benefits, equal opportunity efforts, an outstanding health care system, and many low-cost, high-payoff programs. In particular, the Navy has undertaken a recent series of new initiatives and efforts to improve the quality of medical care. As part of a comprehensive approach to medical needs, we have increased training for our health care professionals, established a number of primary medical care clinics to improve day-to-day access to care, and are examining better ways to balance care between our own facilities and contracted civilian alternatives.

Finally, our efforts must also include funds for the total force. The main objective behind the management of the Naval Reserve is the logical and efficient strengthening of the Navy's warfighting capacity through a process of horizontal integration. Having determined the extent of the reserve requirements, we then equip them with front line weaponry and integrate these units into fleet operations, tactical training, and war planning. Indeed, today's Naval Reserve has evolved from the rigid concept of training purely for mobilization. Rather, as evidenced by events in the Middle East, the probability that Naval Reserve units will serve worldwide in peacetime contingencies has never been higher. Our reservists are making a vital contribution to the health of today's Fleet, and their efforts in manning front line combatants, including Oliver Hazard Perry-class guided missile frigates, is indicative of their commitment and competence.

Sustainability

Sustainability comprises funding for stocks of weapons, reserve forces, and war reserve material that are the Navy's staying power in conflict. Logistics requirements, central drivers of our ability to conduct sustained warfare, include demands for timely delivery of fuel, spares and repair parts. given that national strategy requires planning for protracted conventional war, this area of the budget is critical and has consistently been a high priority of Navy and unified commanders.

Navy's sustainability account has risen steadily over the past nine years. Its real growth over the last six years has been 13 percent. However, the account remains susceptible to budget cuts partly because its results are not immediate. Some weapons bought with FY-83 funds are just now arriving in our shipboard magazines. Stocks on hand are 20-60 percent larger today than in 1981 and expected deliveries this year will improve even these percentages.

Navy planning objectives for threat ordnance are predicated on the assumption that Navy platforms will not run out of weapons prior to war termination. Stocks of surface-to-air missiles' air-to-air missiles, cruise missiles, torpedoes, and sonobuoys are beginning to approach these objectives. Stable and sufficient funding in this area will allow attainment of objectives in the early 1990's.

Modernization

Modernization includes all Navy research, development, testing, and evaluation (RDT&E), fleet modernization or ship alterations, and aircraft and weapons modifications. This funding allows improvements in current platforms and systems as well as research and development for future improvements. Over the past six years, modernization has grown annually 2 percent in real terms. This funding area has, however, suffered from recent budget-tightening action and is now programmed to drop in FY 88-89.

Investment in modernization of ships and aircraft allows us to maintain technological superiority over potential adversaries and threats. Since we are outnumbered by the Soviets at sea, we have maintained a qualitative edge by leveraging American advantages in technology, quality design, innovation, and construction. This advantage is increasingly difficult to retain as the Soviets show a commitment to qualitative as well as quantitative improvements. The Soviet submarine force exemplifies this competition as they improve in quietness and capability. The quality factor on which the Navy depends for superiority in combat can only be preserved through aggressive fleet modernization.

The heart of Navy modernization efforts is a vigorous program of basic research, exploratory development and advanced technology development essential to exploitation of new technologies and ideas contributing to current and future tactical improvements. Our strengthened independent test and evaluation program is fully in consonance with DOD's increased emphasis on the role of operational testing in the acquisition process. The FY 1989 budget request continues this fundamental emphasis on new ideas and systems innovation, and provides funding stability for advanced projects and concepts, particularly in ASW, supported under last year's budget.

Of critical importance in maintaining modern forces at sea is a robust and survivable architecture for overall battle management. We must maintain our lead in space, electronic warfare, and command-control-communications and intelligence (C3I). Without active space systems fully integrated with our forces at sea, we will become hard pressed to effectively control widely dispersed, highly mobile fleets.

Major strategic programs include continued modernization of our sea-based strategic deterrent, notably development of the Trident II D-5 submarine-launched ballistic missile with its prompt hard target kill capability. The Navy budget includes funding for 66 D-5 missiles in FY-89. These missiles will outfit the new Trident submarines scheduled to operate from Kings Bay, Georgia and support necessary operational tests subsequent to initial operational capability in 1989.

The Fleet Modernization Program calls for continued incorporation of technological and warfighting improvements in existing systems and ship classes. For example, the advanced capability provided by vertical launching systems for new Aegis cruisers will be incorporated in alterations to many Spruance class destroyers, giving these proven ASW platforms greatly increased magazine loadouts, flexibility and capability for ASW weapons and cruise missiles. Advances in AAW include an upgraded Navy Tactical Data System aboard cruisers and aircraft carriers, and New Threat Upgrade for major combatants to improve response time and threat-handling capabilities.

Anti-submarine warfare modernization receives emphasis in air and surface development programs. For example, the SQQ-89 Integrated ASW Combat System increases the passive towed array search and processing capability of surface ships and their embarked helicopters by orders of magnitude over earlier systems. The follow-on SQQ-89 Improvement Program will add an advanced low frequency active sonar, essential to keep pace with the quiet threat projected for the future. Fiber optic technologies are being investigated as a way to achieve major cost reductions compared with conventional fabrication techniques. Improvements are being incorporated in airborne ASW with the Update IV avionics in the P-3 aircraft. For use in the current P-3C and the follow-on maritime patrol aircraft, this update will provide vastly improved non-acoustic radar and electronic detection capabilities along with a significantly improved signal processor. Our ASW weaponry is expected to make great strides in accuracy and lethality with the forthcoming Mark 50 air/surface-launched torpedo and the advanced capability Mark 48 sub-launched torpedo. Both weapons are crucial to keeping the technological edge; they also pose a formidable challenge to the enemy for their depth, quietness, and speed. Besides enhancing unit effectiveness, technological improvements in individual ASW platforms and weapons will add to the aggregate ASW capability of the force. This is the greatest payoff against tougher targets. More than ever, the successful ASW campaign of the future is likely to hinge on the aggressive coordinated application of surface, subsurface, air, and surveillance resources, capabilities, exerting vigorous, steady pressure on the enemy below.

Strike and Anti-Surface Warfare capabilities have been significantly upgraded by the marriage of Tomahawk Anti-ship Missiles and the Submarine and Surface Ship Vertical Launch System. Equally important for Anti-Surface Warfare is the increase in our over-the-horizon detection, classification, and targeting capabilities through advance technology options including inverse synthetic aperture radar (ISAR). Programs are in place that add ISAR to P-3C and S-3B aircraft. Fusing these assets together has demonstrated a promising capability using off-the-shelf equipment for the management of long range targeting and battle damage assessment.

We are modernizing shipboard damage control and firefighting capabilities, including the purchase of additional oxygen breathing apparatus and oxygen canisters, special lanterns, communications gear, power-cutting tools, and flame-resistant clothing. This additional equipment will be particularly valuable for our combatants deployed to front-line potential combat zones.

Force Structure

Force structure includes the construction of new ships, ship conversions and reactivation, and aircraft procurement required to meet an ever increasing threat. The Navy's force structure, as reflected in the ships and aircraft in the fleet, under construction, and planned for the future, is a product of well-thought-through tradeoffs to achieve the best possible mix of capabilities to fulfill all of the Navy's missions. That mix, the result of extensive threat and capability analyses, is critical to the continuing balance and effectiveness of the Navy. Figure 3 shows the ship construction to be made possible by the FY 89 Navy budget.

I stated earlier that ASW is my central warfighting concern. The U.S. margin of technological superiority over the expanding and increasingly modern Soviet submarine force is eroding. Although we remain superior, we must continue to apply priority to programs which improve our ability to detect and successfully prosecute a more sophisticated adversary. A top shipbuilding priority to meet the ASW challenge is to ensure funding for the lead submarine of the Seawolf (SSN-21) Class in FY 89. The capabilities provided by this platform are, quite simply, indispensable and crucial to our command of the seas well into the next century. Its superior quieting and tactical speed, coupled with advanced combat systems and greater weapons capacity, will allow it to prevail in the performance of a host of wartime missions in support of our national military strategy.

The carrier battle group will remain a critical element in our ability to meet U.S. national security requirements well into the next century. The aircraft carrier and the other units in the battle group are designed to control vital sea areas and project power when and where required. In war, the carriers and their embarked aircraft can simultaneously defeat surface ships in anti-surface warfare, kill submarines in anti-submarine warfare, destroy aircraft and cruise missiles in anti-air warfare and attack land targets in strike warfare. Integrated battle group surface combatants enhance these operations in all dimensions, most recently adding increasingly dispersed and potent land-attack cruise missile striking power to the already impressive strike capabilities of the carrier airwing.

National commitments are stressing available aircraft carrier assets as we build to achieve a level of 15 deployable units. It is not likely that these commitments will decrease; and with the loss of overseas bases and access, the demands on aircraft carrier battle groups will surely increase. Military requirements are the central determinant in shaping force structure. The Joint Chiefs of Staff and Unified combatant commanders have repeatedly validated an aircraft carrier requirement exceeding 20 carriers. Fifteen deployable carriers are the minimum required to provide a reasonable assurance of success in sequential wartime operations and a balanced force structure that takes into account geographic realities, alliance commitments and national dependencies. USS Abraham Lincoln and USS George Washington, currently under construction, will allow us to achieve and maintain this required level. Several of our aging carriers are now in their fifth decade of proud national service, and must be replaced soon. These older ships, limited by age and size can no longer be modernized and repaired to effectively match the Soviet threat of the twenty-first century. We are moving forward on procurement and initial construction of two carriers, CVN 74 and CVN 75, to replace the oldest of these aging units. The acquisition plan for these two new carriers was designed to eliminate unnecessary waste and take full advantage of production efficiencies while ensuring a cost-effective employment of the nation's shipbuilding resources.

The anti-air warfare posture of our forces at sea will be built around the highly capable Aegis cruiser and destroyer force. Both the Arleigh Burke (DDG-51) class and the Ticonderoga (CG-47) class will be operating with the fleet in growing numbers in the next decade. Both carry the most advanced combat systems afloat today and are integral parts of both offensive and defensive missions for the battlegroup.

The Arleigh Burke (DDG 51) class guided missile destroyer is the top surface shipbuilding priority. The most powerful class of destroyer ever to go to sea, Arleigh Burke will combine the Aegis AAW and SQQ-89 ASW combat system with an impressive array of weaponry: vertically launched SM-2 surface-to-air missiles, the 5"/54 caliber lightweight gun, and the Close-in Weapon System for anti-missile defense. It also features major advancements in countermeasures protection system (CPS) for nuclear, biological, and chemical warfighting. The first ship of this class was funded in FY 85, and two more were appropriated in the FY 87 budget. We are requesting three in FY 89, planning for at least 29 ships of this class.

Ballistic missile submarines contribute about 50 percent of the warheads in the U.S. nuclear strategic arsenal, providing an invulnerable retaliatory capability essential to the nation's power. One additional Trident submarine per year capable of accommodating the range and accuracy improvements of the Trident II/D-5 system has been included in the Navy Five Year shipbuilding plan. This program continues on or ahead of schedule with the early D-5 missile test launches a success and operational deployment scheduled for 1989.

The first of the Improved 688 Los Angeles class nuclear-powered submarine was launched in December 1986, adding quieter and more capable ships to our fleet of attack submarines. Construction continues through our request for two additional SSNs in FY 89.

The Navy's shipbuilding plan includes construction of superb new classes of minesweeping and minehunting ships. By 1997, the Navy will have 14 new ocean going minesweepers and 17 new river and harbor minesweepers.

As the battle force striking arm grows in size and capability, the mobile combat logistics force must expand and modernize. Our primary logistics imperative is replacement of aging fleet oilers by continued procurement of two new TAO-187 class oilers in FY 89. The first of four AOE-6 Class fast combat support ships, designed to accommodate the needs of a complete battle group on station, was funded in FY 87 and one additional ship is requested in FY 89. These ships have the highest operating tempo of any of our assets. To not plan now for their timely replacement is to risk serious curtailment of operational flexibility in future.

Figure 4 is the Navy aircraft procurement plan. The mix of aircraft in the plan continues to support a force level requirement of 15 deployable carriers, 13 active and two reserve carrier air wings, 24 active and 13 reserve patrol squadrons, and three active and one reserve Marine air wings. This procurement program is built upon a foundation of a balance between requirements, available funding and optimal acquisition strategies.

Our objective is to ensure that we put to sea a modern and effective force capable of meeting all commitments. No other aircraft more clearly represents progress toward our goal than the F/A-18 Hornet, a true force multiplier providing operational commanders with flexibility to employ it in either the fighter or attack role. The F/A-18 is the nation's first strike-fighter, designed for such traditional strike applications as interdiction and close air support without compromising fighter capabilities. The result is an aircraft with excellent fighter and self-defense capabilities that increases strike mission survivability and supplements the F-14 in fleet air defense.

Looking to the future, the Advanced Tactical Aircraft (ATA) will maintain our comparative advantages in high technology aircraft systems. This vital tactical air platform will ensure effective penetration and successful attack in even the most heavily defended enemy areas.

In order to improve the vital A6E all-weather attack aircraft, we intend to undertake a digitalized remanufacturing program to upgrade the avionics package. Doing so will ensure that the Intruder is capable of meeting the enhanced threat from defensive systems through the turn of the century, and will take full advantage of the advanced research and development conducted for the A6F without incurring the cost of building any new aircraft.

The V-22A Osprey, a joint service development program, combines the best features of helicopters and fixed wing turboprop aircraft. Osprey will be capable of flying over 2,000 nautical miles without refueling, providing Navy a dramatically improved combat search and rescue capability. Its first flight is scheduled in June 1988.

The Long Range Air ASW Capable Aircraft (LRAACA) represents a significant improvement in both range and payload over the current P3C Orion. This platform will be a key system in our priority program to maintain our tactical advantage over an increasingly capable Soviet submarine threat.

The SH-60F is under development to replace the SH-3H as our carrier inner-zone ASW helicopter. A firm-fixed price contract has been signed for development of the SH-60F including firm fixed price options for the first five production lots. The SH-60F will employ a new longer range active dipping sonar in addition to sonobouys to track and attack submarines. This helicopter will incorporate significant improvements in reliability and maintainability as well as vastly improved tactical capabilities.

The F-14A+, with its new GE F110 engines, will be more than a match for threat fighters in the close-in, air combat arena. The follow-on program, the F-14D, will close emerging gaps in the carrier battle group's outer air defenses against new-generation Soviet bombers and cruise missiles.

This aircraft procurement plan, which includes Marine Corps aviation as well, provides modest growth to properly complement fleet force structure. Support for this plan will help check the aging trend of our aircraft, and achieve our goal to put to sea a modern and efficient force able to meet all commitments.

NAVY TOA BY PILLAR FY 89

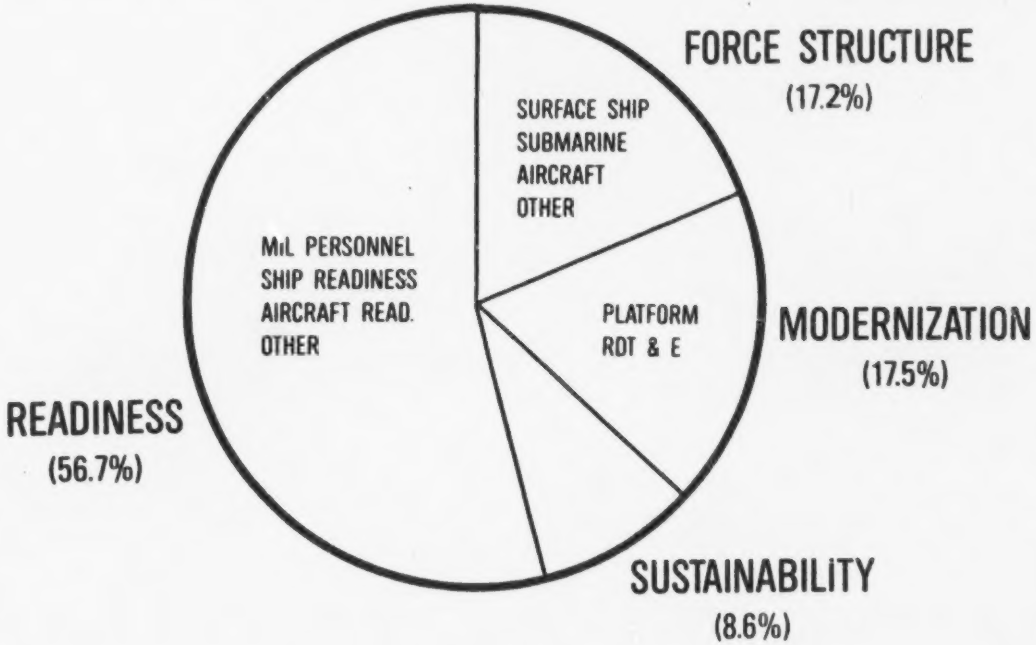


FIGURE 1

FOUR PILLAR TRENDS
CONSTANT DOLLARS

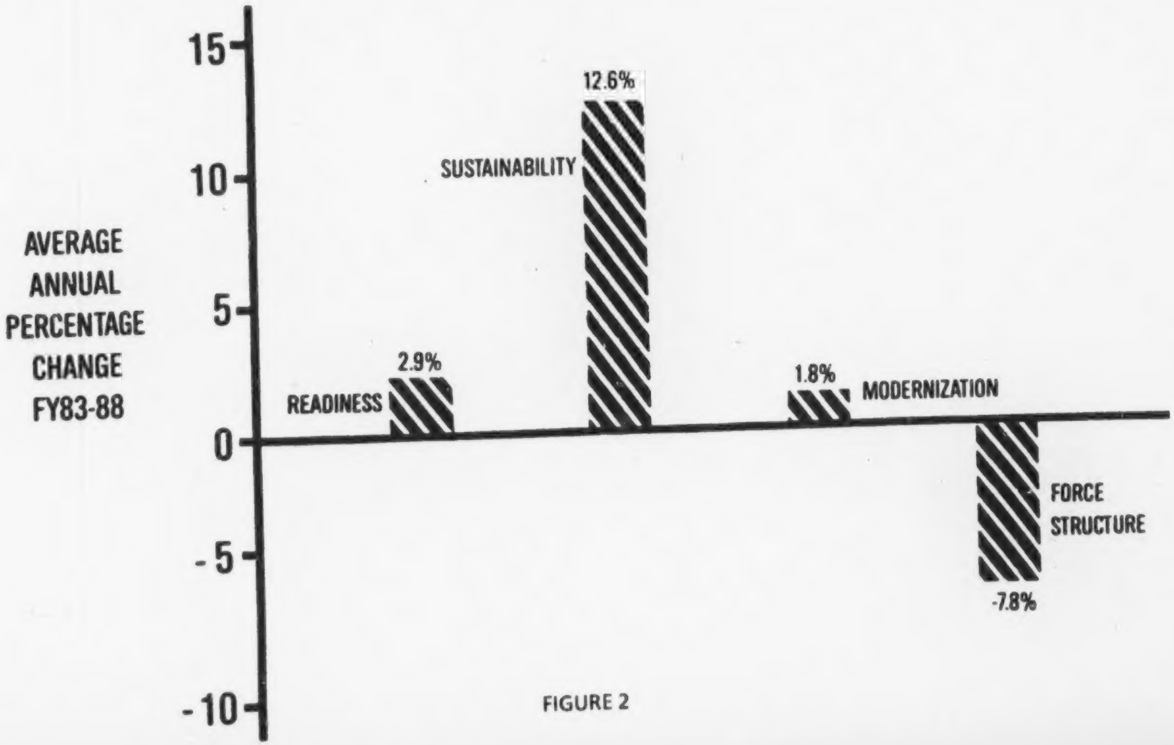


FIGURE 2

SHIP CONSTRUCTION PROGRAM

New Construction	FY88	FY89
Trident (Ballistic Missile Submarine)	1	1
CVN (Aircraft Carrier)	2	-
SSN-688 (Attack Submarine)	3	2
SSN-21 (Attack Submarine)	-	1
CG-47 (Guided Missile Cruiser)	5	-
DDG-51 (Guided Missile Destroyer)	-	3
LHD-1 (Amphibious Ship)	1	1
LSD (CV) (Landing Ship Dock-Cargo Variant)	1	-
MHC-1 (Coastal Minehunter)	-	2
TAO-187 (Fleet Oiler)	2	2
TAGOS (Surveillance Ship)	-	3
AOE-6 (Fast Combat Support Ship)	-	1
AGOR (Research Ship)	-	1
SUB TOTAL	15	17
Conversions		
CV (Aircraft Carrier) SLEP	1	-
AO (Oiler) Conversion	1	2
TACS (Crane Ship) Conversion	2	-

FIGURE 3

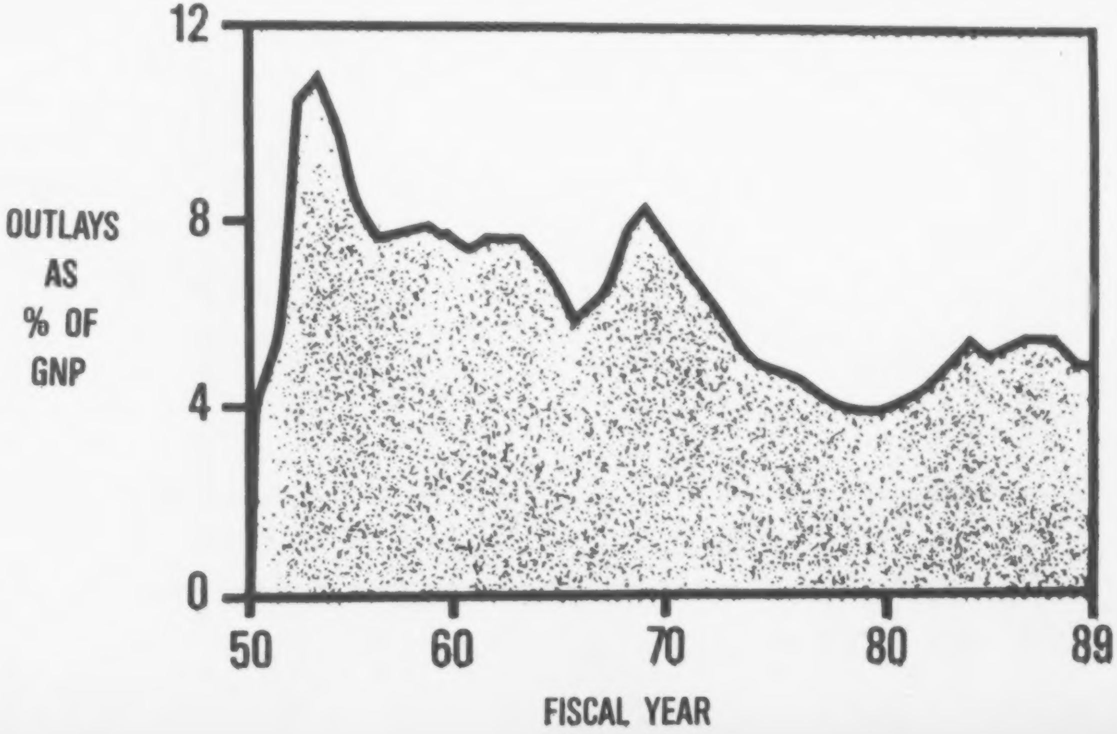
AIRCRAFT PROCUREMENT PLAN

Aircraft	FY88	FY89	FY90	FY91	FY92
A-6 (Intruder)	10	-	15	24	24
EA-6B (Prowler)	12	9	9	9	9
AV-8B (Harrier)	24	24	24	24	-
F-14A/D (Tomcat)	12	12	12	30	42
F/A-18 (Hornet)	84	72	72	72	72
MH/CH-53E (Super Stallion)	14	14	-	-	-
AH-1W (Sea Cobra)	34	-	-	-	-
SH-60B (Seahawk)	6	6	6	12	12
SH-60F (CV ASW Helo)	18	18	18	12	12
LRAACA	-	-	2	7	18
V-22A (Osprey)	-	-	12	45	61
E-2C (Hawkeye)	6	6	6	6	6
T-44A	-	-	15	-	-
T-45 (Goshawk)	12	24	24	48	48
E-6A	3	7	-	-	-
HH-60 (HCS)	9	-	-	-	-
TOTAL	244	192	215	289	304

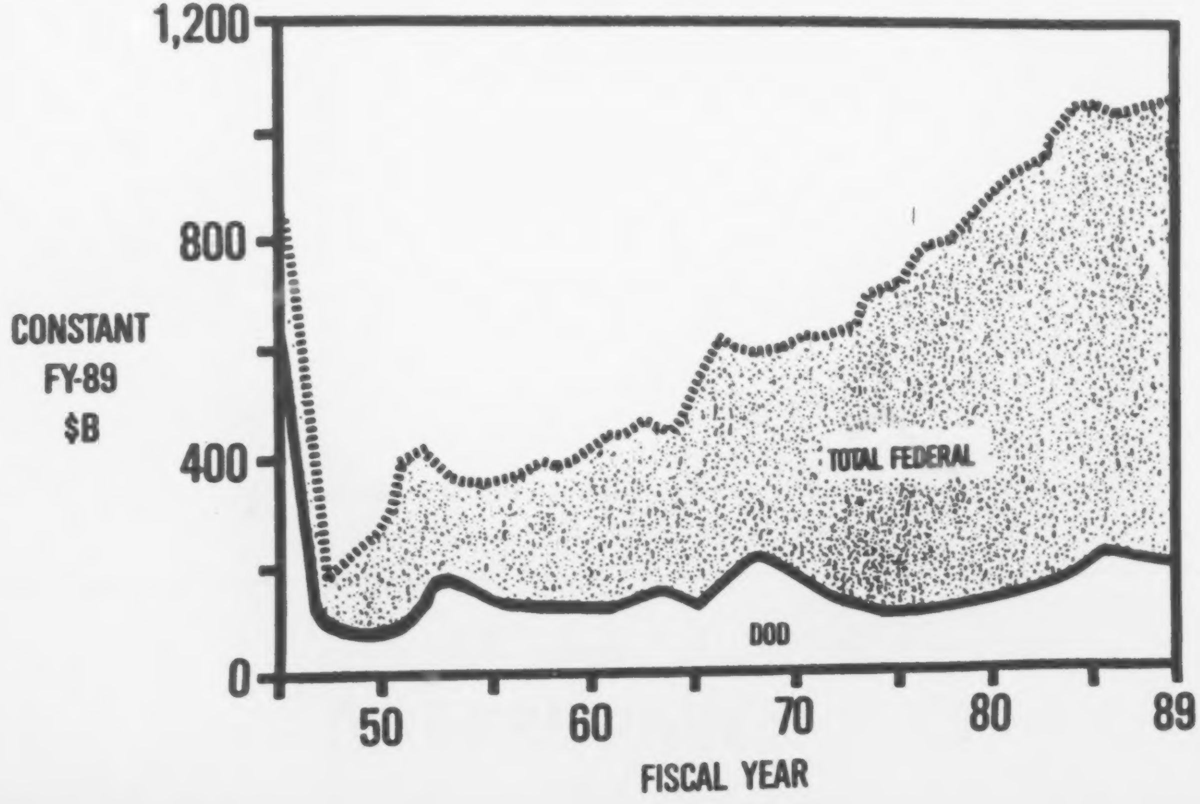
FIGURE 4

DEFENSE SHARE OF GNP

FY 1950 TO FY 1989



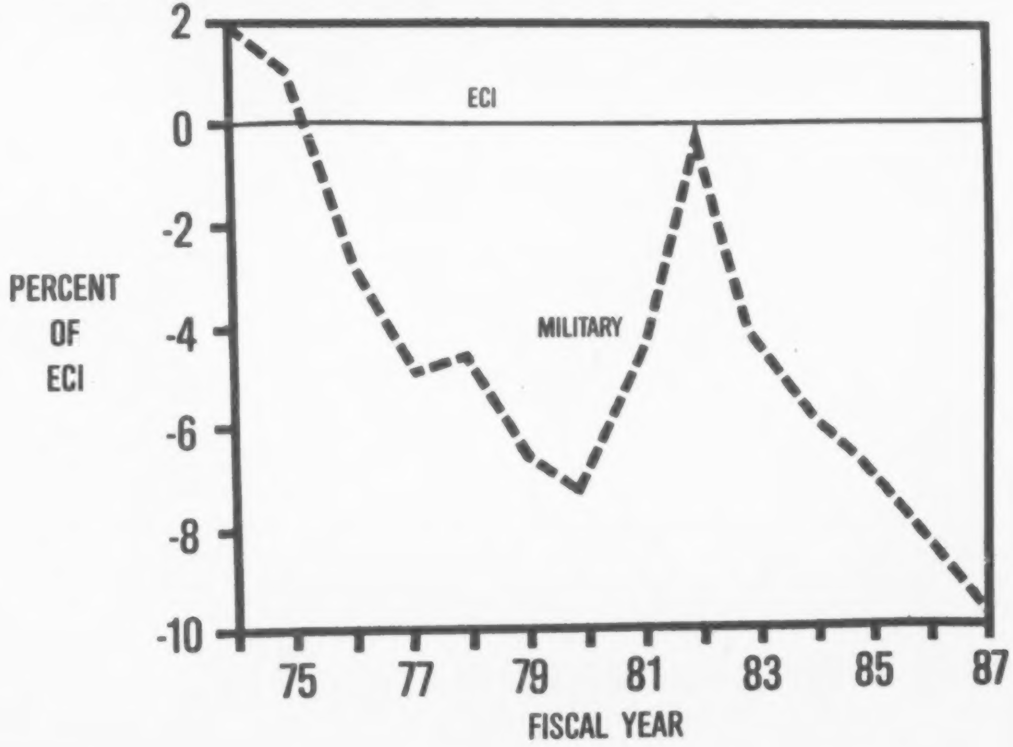
TOTAL FEDERAL OUTLAYS



FY 80-89 SERVICE TOA COMPARISON

	REAL PROGRAM GROWTH	SHARE CHANGE
ARMY	3.3%	.6%
AIR FORCE	4.8%	2.1%
MARINE CORPS	3.6%	.5%
NAVY	3.1%	–3.1%

COMPARABILITY SHORTFALL IN MILITARY PAY COMPARED TO EMPLOYMENT COST INDEX – ECI



U.S. MARINE CORPS

STATEMENT OF GENERAL A.M. GRAY, COMMANDANT OF THE MARINE CORPS

CONCEPT AND ISSUES BOOKLET

Senator JOHNSTON. General Gray.

General GRAY. Thank you very much, Mr. Chairman. It is indeed a pleasure to appear before your Committee today. The Marine Corps has submitted its Annual Report to Congress statement along with a booklet on Concepts and Issues which we would request be put into the record.

Senator JOHNSTON. Without objection.

[The material follows:]

Commandant of the Marine Corps

Annual Report To Congress

Concepts and Issues

3 February 1987

To the Reader:

Concepts and Issues is published annually to describe the current "state of the Corps" to audiences internal and external to the Marine Corps. New in this year's publication is the information previously contained in the Marine Corps Resources and Forces Summary. With the inclusion of the data from that booklet, Concepts and Issues now provides both a detailed backup document to support the Commandant's Posture Statement and a single source summary of the substance of the Marine Corps Program Objective Memorandum (POM).

Concepts and Issues is not all inclusive. Program sponsors have identified only key programs for inclusion, and some programs from previous editions have been deleted (see Appendix C). Program quantity and cost displays reflect POM 88/89-92 as updated by the FY 88/89 President's Budget data. Because the Planning, Programming and Budgeting System is a dynamic, continuous process, those programs—and their attendant displays—are always subject to change.

The Marine Corps POM proceeds from the requirement to man, train, and equip Fleet Marine Forces consistent with fiscal realities. Focusing on sound leadership and a dedication to readiness and flexibility, we remain committed to supporting our national strategy with the most cost-effective combat organization possible. I hope Concepts and Issues contributes to the reader's understanding of our efforts to achieve this objective.

Concepts and Issues does not express official Marine Corps policy on doctrinal matters; however, it does address geopolitical realities and various other factors that influence our structure, requirements and capabilities. Comments and suggestions for future editions are welcome.

Sincerely,

W. R. ETNYRE
Major General, U.S. Marine Corps
Deputy Chief of Staff for Requirements and Programs

25 February 1988

A MESSAGE FROM THE COMMANDANT OF THE MARINE CORPS

This pamphlet contains the Fiscal Year 89 Annual Report of the Marine Corps. While it is brief, it represents a fundamental statement of our operational and institutional orientation as the Nation's expeditionary force. Also included is a copy of Concepts and Issues, a Headquarters Marine Corps publication last printed in 1987. Chapter II, addressing Marine Corps planning and resource allocation, has been updated to reflect the Amended FY 88/89 Biennial Budget and includes DOD and Marine Corps allocations for each appropriation. While the information in the remaining chapters is slightly dated, it provides a useful overview of our concepts, equipment and development goals. I urge you to review it and I welcome any comments you may wish to provide.

A. M. GRAY
General, U.S. Marine Corps

THE ANNUAL REPORT OF THE MARINE CORPS
TO CONGRESS

BY GENERAL A. M. GRAY

COMMANDANT OF THE MARINE CORPS

Mr. Chairman, Members of the Committee

This is my first annual report to Congress and the Nation. With your permission I would like to share with you my assessment of the current state of the Corps and, more importantly, my vision of its future.

The Corps is sound and fit for service. During the defense build-up over the last 7 years, the American people made a major investment in the Marine Corps. As directed by Congress and the Secretary of Defense, we devoted our efforts to making improvements in four areas: readiness, sustainability, modernization, and force structure. We have improved logistics sustainability and enhanced our tactical mobility. We are completing the modernization of our command and control equipment, aviation and infantry weapons.

As we move into an era of constrained federal spending, it is important to remember that, in terms of equipment, the Marine Corps is a modern force. We appreciate the help of Congress, and particularly of this committee, in bringing this modernization about. We are counting on your continued support in order to ensure that our capabilities and equipment will not be permitted to atrophy. The public investment in our total force capability over the past years more than justifies this requirement.

Our people complement the high quality of our equipment. In accordance with the will of each Congress since the Ninety-third Congress, the Marine Corps has scrupulously adhered to the highest recruiting standards possible. Ninety-eight percent of our recruits are high school graduates, our officer programs are full, and our Marines, officer and enlisted, want to stay in the Corps. In short, the Corps is ready to face the difficult challenges of the approaching turn of the century.

I would like to devote the remainder of this statement to my vision of the future for the Marine Corps. In order to bring this view into reality the Marine Corps will reaffirm its historical relationship with Congress. We invite your thoughts and continuing involvement.

There are three areas I want to discuss with you today: our purpose in supporting the Nation's security, the way we intend to fight, and our view of ourselves as Marines. Each is central to what the Marine Corps is all about: the ability to win in combat when we are called upon by the Nation to fight. Everything we do must derive from that focus. Anything that does not relate to it is something we probably shouldn't be doing. We will continue to eliminate anything that works against our ability to win. That includes too much reporting and paperwork in our combat units. We will complete the streamlining of our headquarters, and create conditions which develop the initiative of our junior leaders.The Marine Corps responds to the needs of the Nation. However, there have been periodic examinations of our utility, particularly during the past decade. The question has often been asked: do we primarily fight in Europe or Korea, or are we primarily an expeditionary force? My view is clear: we have a contribution to make in each. That is to say, we are a naval expeditionary force. We do have a mission in Europe and Korea, in supporting a naval campaign. Our commitment to the defense of both the northern and southern flanks of NATO illustrates the aggregate usefulness of our maritime forces. The battle of the North Atlantic can be lost in the North Norwegian Sea by failing to establish advanced amphibious naval bases to deny the Soviets access to Norwegian air bases necessary to achieve their goal. Additionally, sea lines of communication cannot be guaranteed without amphibious forces. This is operationally significant to the fleet, and reflects the value of the Marine Corps as a sustainable landward extension of naval power. Let it be clearly stated that the Marine Corps is prepared for general war should that eventuality arise. As such, these are appropriate missions for us.

While we are fully prepared for the most challenging conflict, your Marine Corps must also stand ready for the most likely conflict -- and that is in the third world. The reason the Nation has a Marine Corps is to project power into areas where we do not have forces stationed in peacetime. Our amphibious capability, our seaborne mobility, and our expeditionary nature makes us uniquely suited for the task; this is the major contribution we provide the Nation.

In those areas of likely conflict we can protect American interests through the deterrent value of Naval forces, and if deterrence fails, we can launch and win an expeditionary campaign. For this purpose, we maintain forward deployed Marine Air-Ground Task Forces with a wide range of special operations capabilities. The availability of amphibious forces and their capability to respond across the spectrum of conflict, makes them the forces of choice in crisis response. These forces complement our national military strategy, provide on-scene assets in fast developing crises, and are fully interoperable with the Army, Navy, and Air Force. The interservice cooperation in developing a needed response to a very real threat has been a success story of significant proportions. The Marine Corps' capability gives the Nation another option when faced with complex developments, such as terrorist incidents, and when time-distance and clearance factors complicate the employment of other specialized forces. Likewise, our forward deployed special operations capable MAGTFs are trained and equipped to supplement or even reinforce these specialized units when they are committed. The continuing forward deployment of these forces as freedom's front line contributes to deterring our adversaries while providing a visible warning of our ability to respond across a broad spectrum of conflict.

The Marine Corps' contributions to national security depend greatly upon amphibious shipping. I do not believe that we have enough amphibious ships to accomplish all that is required. Amphibious warfare is crucial to the striking fleet's ability to carry out all its tasks within the context of the Maritime Strategy. Without this capability, the Navy cannot protect the sea lines of communication or project credible and sustainable power ashore. The needs of the Nation require that we have amphibious lift for two Marine Expeditionary Forces, one from each coast.

It will come as no surprise to this committee to know that we have spent considerable time examining our Marine Security Guard commitment to our embassies around the world. I have spoken personally with the Secretary of State on this subject and your Marine Corps and the Department of State are working together to meet existing challenges. I hold myself accountable for the performance of our Marines in their sensitive assignments. We have restructured the selection process with modern evaluation techniques. We are providing our Marines with additional cultural and language training. We are also redoubling our training efforts to ensure that they can take care of themselves and their demanding duties. The Marine Corps and the State Department are adopting joint inspection techniques, thereby working more closely together than ever before to identify and rectify problem areas as early as possible. I meet with all ambassadors before they assume their duties to discuss issues of mutual concern regarding their Marines. Finally, when possible on my trips abroad, I inspect my Marines personally and report my findings to the Secretary of State. We have a new and vigorous program with regard to this mission, and I am optimistic as to its probability for success.

The Marine Corps provides another security function for the Navy which we are also improving: the protection of selected ships and installations by the Marine Corps Security Force Battalions. We have reorganized the existing forces reducing administrative overhead, and provided a larger, better trained, and more effective force. We believe that this measure contributes materially to enhanced security in the fleet and, in particular, has given the fleet Commanders-in-Chief a more responsive force.

The second area where I want to share my thoughts with you is how we fight. I want to make my view clear. The Marine Corps of the future will fight a high tempo, fluid, combined-arms, manuever-oriented conflict. Our goal will be to collapse our opponent, destroying his ability to fight as a cohesive, organized force; this is the way to obtain quicker results with fewer casualties. In battle, our principal advantage will be our ability to fight in such a way as to disrupt our opponent's decision process. That is to say, our advantage will be due less to equipment than to our excellence at tactics and the operational art.

Let me tell you frankly that we need some improvements before we can claim tactical and operational excellence on the level of my expectations. Accordingly, we are raising standards. It is essential that the entire Marine Corps, active and reserve, train the way it will fight. Military forces use campaign plans in wartime to conduct operations and engage the enemy. We need to bring the same cohesive thrust to our peacetime training actions. Therefore, we are creating a Marine Corps Campaign Plan which gives the necessary impetus to our training and exercise. These actions will assist all our operating forces and the supporting establishment in preparing for combat by focusing our efforts on selected operational situations and objectives throughout the Corps during the fixed period of time. We will ensure that all elements of our Corps progress together. Our effectiveness depends on being able to task organize forces from both the Atlantic and Pacific. We will create "one Marine Corps" with uniform warfighting doctrine and common operating procedure.

We will continue to emphasize increased opportunity for live fire training. The focus of our training for combat will be on free play and force-on-force exercises that replicate the uncertainty and rapid change of the battlefield.

Our training is going back to basics to emphasize battlefield orientation. In today's environment, there are no rear areas; every Marine must know how to fight as a rifleman. All Marine training will be based on that concept. The length of recruit training won't change; content will. We are incorporating "Basic Warrior Training" which will develop and hone combat skills in all Marines. Our leaders will be trained to be self-reliant and capable of independent decisions on the battlefield. Our overall training will stress physical and mental toughness. Whenever you see a Marine, there is one thing of which you can be certain; he'll be ready to fight, right then and there, if necessary. He also may be an outstanding mechanic, administrator, driver, or cook, but first and foremost, he'll be a Marine.

We are turning on the brain power to ensure we are using what we've got to our fullest potential. We have established the Marine Corps Combat Development Command at Quantico to teach Marines how to think in, and about war. We are resurrecting Quantico as the intellectual center of the Corps, where innovative and conceptual study will ensure proper attention to the conduct of military operation. At the heart of our intellectual preparation lies military history, which we will use as our laboratory for combat, drawing on the positive and negative experiences of a variety of Nations and forces at war. Military history will form an integral part of the education and continuing development of our officer corps. Innovative thought will stand above normal bureaucratic lobbies that often interfere with clear vision.

A major effort is being dedicated to studying our force structure. We want to put more Marines into infantry battalions, light armor units, and aviation squadrons. Those assets which are used mostly in general war, such as some of our heavy armor and certain engineer and logistics functions, may be considered for transfer to the reserves. We want to combine reconnaissance, surveillance, remotely piloted vehicles, and selected intelligence functions into a single unit. Because of the electronic and information revolutions, we must achieve a new level of technical excellence in a field known as Command, Control, Communications, Computers, Information, and Intelligence. Only in this way can we turn enemy miscues into tactical actions on our part to achieve operational success. A Headquarters Marine Corps publication, Concepts and Issues also provides some insight into how we are planning for the future.

In order to put more "fight" into our combat units as well as in meeting fiscal constraints, we are streamlining and reorganizing our supporting establishment. Marine Corps Headquarters is being reduced, and unnecessary levels of bureaucracy are being eliminated. At Quantico, we are combining critical functions previously divided between a number of locations. The new Marine Corps Combat Development Command will link our doctrine, combat development, and training. For the time being, we have accommodated this reorganization in existing facilities, with little or no increase in personnel. Acquisition is also being consolidated under the Marine Corps Research, Development and Acquisition Command. This reorganization is intended to reduce the time and cost of fielding combat equipment.

The third area I would like to talk about is our view of ourselves as Marines. Our strength is that we see ourselves first and foremost as Marines, not as members of some sub-group or specialty. We put first, in all situations, the Marine Corps' main goal: the ability to win if called upon to fight. If that means that our particular area of expertise--aviation, infantry, logistics, whatever--has to take a back seat to some other element in a situation, or has to do with fewer resources, then we'll adapt. Our concern is for the Marine Corps as a whole. I intend to build on our strength, to make it something all Marines share, without exception. Battles and wars are won by people more than by equipment. I intend to make a number of changes in our policies toward people. In a number of cases I shall need your help.

First, I intend to fill Marine Corps ranks from the bottom up, with the first priority going to specific combat units. In the future, when I visit operational commands, I will expect to see those units fully manned.

Second, I intend to have cohesive, stable units. In my view, our level of personnel turbulence and turnover undermines combat effectiveness. It shatters small unit cohesion and makes effective training impossible. I have personally charged our Force Structure Study Group with addressing this problem and providing solutions. I may need your assistance in achieving this goal.

Finally, I need your help with a specific problem of great importance to our Marines and their families having to do with adequate medical care. Specifically, there are too few doctors and corpsmen. I know this problem is not new to this committee, but it has not been resolved adequately. The Secretary of the Navy has made this problem one of his top priorities. I urge your support of his efforts in this critical area. The impact on our combat readiness and the quality of care we provide our families in peacetime is significant.

The Marine Corps' direction is clear. We will be prepared to do whatever has to be done to protect and ensure national interest globally, where permanent defenses cannot be maintained. And, in the lean times to come, we'll take what you give us, do what is required - and more.

Our requests are as follows:

($ MILLIONS) Appropriation Table	FY87	FY88	FY89
Military Personnel Marine Corps	$5438.8	5542.8	$5716.2
Reserve Personnel Marine Corps	277.3	295.4	315.7
Operations and Maintenance Marine Corps	1841.4	1795.3	1792.0
Operations and Maintenance Marine Corps Reserve	64.0	69.5	77.5
Procurement, Marine Corps	1438.5	1295.6	1157.3
Total	$9060.0	8998.6	$9058.7

SEMPER FIDELIS

GENERAL A. M. GRAY, USMC

Born in Point Pleasant Beach, NJ, General Gray enlisted in the Marine Corps in 1950. He served overseas with FMF, Pacific, attaining the rank of sergeant before being commissioned a second lieutenant in April 1952. Early tours included service with the 11th and 7th Marines, 1st Marine Division in Korea, the 8th Marines, 2d Marine Division at Camp Lejeune, NC, and Headquarters Marine Corps, Washington, DC. During this early period, he also saw overseas service in Guantanamo Bay and Vietnam.

As a major, General Gray joined the 12th Marines, 3d Marine Division, Vietnam in October 1965, serving concurrently as regimental communications officer, regimental training officer, and artillery aerial observer. He took command of the Composite Artillery Battalion and U.S. Free World Forces at Gio Linh in April 1967. In September 1967, General Gray was reassigned to the III Marine Amphibious Force in Da Nang where he commanded the 1st Radio Battalion elements throughout I Corps until February 1968. Following a brief tour in the United States, he returned to

Vietnam from June to September 1969 in conjunction with surveillance and reconnaissance matters in the I Corps area.

After his Vietnam tour, General Gray served as Commanding Officer of the 1st Battalion, 2d Marines; Battalion Landing Team 1/2; the 2d Marines; the 4th Marines; and Camp Commander of Camp Hansen, Okinawa, Japan. While commanding the 33d Marine Amphibious Unit and Regimental Landing Team-4, and concurrently serving as Deputy Commander, 9th Marine Amphibious Brigade, General Gray directed the Southeast Asia evacuation operations in 1975.

Advanced to Brigadier General in March 1976, General Gray served as Commanding General, Landing Force Training Command, Atlantic, and the 4th Marine Amphibious Brigade. Promoted to Major General in February 1980, he assumed command of the 2d Marine Division, FMF, Atlantic, Camp Lejeune, NC, in June 1981. Following his promotion to Lieutenant General on 29 August 1984, he was reassigned as Commanding General, FMF Atlantic/Commanding General, II MAF, and Commanding General, FMF, Europe. General Gray was promoted to general and became Commandant of the Marine Corps on 1 July 1987.

He is married to the former Jan Goss of Burlington, VT.

Concepts and Issues

CHAPTER I

THE MARINE CORPS' CONTRIBUTION TO NATIONAL SECURITY

Introduction

This chapter relates national security requirements and strategy to the employment of Marine forces. It begins with a review of issues affecting our national strategy, narrows to a brief explanation of the Maritime Strategy and provides examples of how the Marine Corps, in concert with the Navy, offers significant options to our country in every potential contingency. Finally, the section titled "The Marine Corps Today" outlines the current posture of the Corps and summarizes how the Marines' assessment of present capabilities are translated into aggressive modernization efforts.

National Requirements

Challenges to the security of the United States are global. They result from long-standing political commitments, economic realities and the potential threats to peace posed by the Soviet Union acting directly or through surrogates. Since we do not have unlimited means, we have adopted a national military strategy which emphasizes deterrence. If deterrence fails, we will defend as far forward as possible in a global coalition posture. By implication, we accept the requirement for a credible force projection capability since the means to project military power are key to the initial deterrence of aggression and to the conduct of a successful forward defense should deterrence fail.

The precepts of U.S. military strategy--deterrence and forward defense--place a premium on rapid deployability. They require that we have sufficient amounts of airlift, sealift and prepositioned materiel overseas to maintain a credible deterrent while minimizing our presence in allied nations. They also require that we be able to move major combat forces rapidly to endangered areas and to support them for as long as they are needed. As the scope of our security interests has grown and the threat of regional conflicts has increased, so too has the range of demands on our projection forces. The Navy/Marine Corps team fulfills this demand for credible force projection.

The proximity of Soviet forces to our allies and interests imposes severe demands on the timeliness of a military response. Consequently, our strategy for defense stresses a reliance on forward deployments to areas such as Europe, Northeast Asia and Southwest Asia. These forward deployed forces assist in deterring aggression by providing visible and convincing evidence of support; and they increase our ability to respond effectively and in a timely manner. They also discourage regional conflicts and provide a stable environment for diplomacy.

The Department of the Navy (DON), with direction from the National Command Authorities (NCA), has developed a program which will achieve maritime power, deter aggression and successfully advance our nation's foreign policy objectives. This program is based on a Maritime Strategy that accepts the geographic and economic realities which have molded our nation's growth and development, and which will continue to affect the attainment of national goals.

The Maritime Strategy is a broad statement of governing principles and naval objectives that will enable us to achieve the goals mandated by our global national interests. The strategy has evolved into concepts for the global employment of naval forces to attain naval objectives. Most importantly, the Maritime Strategy is firmly rooted in specific geographic theaters and keyed to specific threat capabilities.

In conclusion, there are no comforting trends in either the international arena or in Soviet capabilities. Soviet actions do not justify optimistic assumptions about their intentions; and our interests remain threatened by terrorism, the proliferation of arms, low intensity conflicts and political and economic instabilities. These conditions threaten us directly and provide opportunities for exploitation by our major antagonists. Hence, the demands upon our military capabilities are unlikely to diminish, and our national military strategy with its proper emphasis on deterrence, will continue to be tested. That strategy will continue to rely upon the global reach, rapid responsiveness and integrated combat power that are unique to maritime forces.

Maritime Strategy

The Maritime Strategy is based on the national military strategy as reflected in pertinent policy and strategic documents. It is centered upon an aggressive forward naval presence. The general goals of this strategy can be summarized as follows:

- Deter war if at all possible
- If deterrence fails:
  - destroy enemy maritime forces
  - protect allied sea lines of communications (SLOC)
  - support the land campaign
  - secure favorable leverage for war termination

If deterrence fails, the primary national objective will be to limit the expansion of the conflict. However, if that effort is unsuccessful, consideration must be given to affecting the scope and duration of the war. Maritime superiority will enable our alliances to limit Soviet advantages and allow for the attack of Soviet assets in areas where they would prefer not to fight. Translated into a specific North Atlantic Treaty Organization (NATO) scenario, this strategy would enable NATO forces to secure the Atlantic SLOC to Europe, defeat Soviet attacks on the northern flank and, if need be, carry the fight to Soviet operating areas to seek the best possible leverage for war termination.

The Maritime Strategy prescribes a well-coordinated, sequential concept of global operations that capitalizes on alliance strong points and exploits known Soviet weaknesses. It is complementary to the coalition defense of Western Europe and enhances the efforts of other conventional forces.

The Maritime Strategy itself is broken into three phases:

- Deterrence/Transition to war
- Seize the initiative
- Carry the fight to the enemy

In the first phase, both sides would seek to limit the confrontation while posturing for an advantageous position if that effort failed. The Soviets would likely disperse their military assets to limit their initial vulnerability and to seize key pieces of terrain or vital littorals. To that end, their surface and submarine forces would deploy to their assigned wartime operating areas.

On a parallel track, naval forces would begin a forward movement as well. Our own submarine and surface action groups would move from their homeports toward operating areas. Marine Air-Ground Task Forces (MAGTFs) would either embark as landing forces on amphibious task force ships and/or be airlanded to marry up with prepositioned stocks and equipment. During this phase, we would aim to increase readiness, to optimize the deployment of forces, to maximize available warning time, and to cede no vital area by default; e.g., the Norwegian Sea, the Strait of Hormuz, or the Mediterranean Sea.

Should actual hostilities begin between NATO and the Warsaw Pact, then the strategy would be to counter the attack, attrite enemy forces and seize the initiative. Protection of the Atlantic SLOC would be undertaken as far forward as possible so as to allow the reinforcement of central Europe. Taking full advantage of the U.S. edge in antisubmarine warfare (ASW) technology, the destruction of the Soviet submarine fleet would be a primary objective; and ASW operations would be conducted as far forward as possible.

Although this second phase does not envision using the massed combat power of carrier battle groups (CVBGs) and amphibious task forces to strike the Soviets far forward, operations in support of the main battle are not discounted. The opportunity for amphibious forces to strike behind Soviet lines at points of opportunity would be carefully considered and exploited.

The last phase of the Maritime Strategy seeks to build on the successes of preceding phases, so that war termination can be achieved on terms favorable to the U.S. and its allies. Attacks of massed naval forces on the flanks could now be undertaken in the face of a weakened Soviet force. Our amphibious forces would press home the initiative and carry the fight to the enemy, destroying his forces, regaining territory and supporting the main theater land campaign.

To achieve its general objectives, the Maritime Strategy must be supported by global, forward deployed forces that are superior to likely opponents: global because our interests and allies are global; forward deployed because deterrence of our opponents and support of our allies requires we be where those enemies and interests are; and superior because if deterrence fails, we intend to win.

Amphibious Forces' Contributions to the Maritime Strategy

The Maritime Strategy recognizes that the most technologically advanced weapons systems, manned by the most professional and well-led personnel, will not produce victory unless they are employed within a strategic and tactical framework that maximizes their potential. This concept is the essence of strategy. To anticipate when, and in what situation, the nation's armed forces may be employed next is fundamental. In addition, we must develop force structures, and fit weapons and tactics to the task.

In concert with strategists and planners in the Navy, the Marine Corps has evaluated the uses of amphibious forces across the spectrum of conflict from peacetime presence, through crisis response, and ultimately to strategic nuclear confrontation. This has led to the development of an Amphibious Strategy that is a component of, and completely complementary to, the Maritime Strategy. Not only will this strategy provide the basis for future program development, it will engender increased understanding and provide a baseline reference for ongoing cooperative planning efforts.

The Navy/Marine Corps team demonstrates its flexibility in support of national objectives in many ways. For example this team can:

- Assist diplomatic efforts through peaceful projection of influence and, during periods of crisis, provide a selective show of force and interest.

- Assist with early commitment of U.S. forces to combat when required by controlling airfield and port facilities.

- Assist allies though provision of flexible and selective levels of military assistance.

- Provide humanitarian assistance and disaster relief.

- Protect and evacuate noncombatants and installations.

- Project military power ashore through amphibious assaults against defended objectives.

- Occupy and defend geographically strategic choke points.

Although some critics have overlooked the advantages offered by naval forces, this country derives significant benefits from its employment of maritime-based forces. Principal among these is the contribution of naval forces towards regional stability throughout the world. The fleets with their Fleet Marine Forces (FMFs) constitute this nation's primary military force for response to distant crises. The Navy/Marine Corps team is a mobile force with the means to exercise sea control, to provide offshore presence, and to execute power projection and influence. Ready amphibious forces equipped with helicopters, air-cushion landing craft, and amphibious vehicles are not dependent on air facilities, ports, and land bases (with their attendant logistical and political complications). They choose their point of landing to avoid concentrations of hostile forces; and they employ precisely the right size and mix of forces required to accomplish the mission assigned. Indeed, these specially trained and equipped Marine forces embarked in amphibious shipping represent the ultimate in mobility, flexibility, and readiness.

The history of the past 38 years supports this assertion. In the approximately 250 crises to which the U.S. responded by deploying forces, naval forces have been used in over 200 of these events--and amphibious forces in 80% of those instances. It is fair then to assume that the nation will continue to look to the Marine Corps for its time-tested expeditionary capabilities and readiness. It is the traditional role and the charter of the Corps. This high incidence of involvement results directly from the Marine Corps' ready, flexible and mobile character. Our economy and international political position today are increasingly dependent on the existence of these naval forces.

The key advantages of maritime forces are their flexibility, staying power, and credibility. Whether small and unobtrusive or large and visible, naval forces stand as a clear manifestation of national will. They provide a signal and display our interests and a willingness to defend them if warranted. Unlike garrison forces, maritime elements can express U.S. resolve without impinging upon the sovereignty or political sensitivities of a region. In addition, these forces can operate without basing or airspace overflight rights, while remaining under discreet but direct political control. Unlike air-transported or prepositioned elements, Marines embarked aboard amphibious shipping provide this nation's sole forcible entry capability against defended beachheads.

Maritime forces remain prepared to signal our resolve and provide a credible deterrent that is well understood by our friends and foes alike; for superior naval forces, employed within the framework of a global maritime strategy, are the single most critical requirement for the attainment of our national objectives. Balanced naval forces provide the basic tools necessary to assert and defend our interests: they protect our sea lanes and, if need be, project sizable forces ashore in local or global scenarios. In our national arsenal, these formidable capabilities are unique to the Navy/Marine Corps team.

Mission, Functions and Organization of the Corps

The Marine Corps is unique among the four services because the National Security Act of 1947, as amended, provides that the Marine Corps will consist of and shall provide, in part, for these key defense elements:

- Three combat divisions, air wings and such other land combat, aviation, and other services to ... organized, trained and equipped to provide Fleet Marine Forces of combined arms ... for service with the fleet.

- Detachments and organizations for service on armed vessels of the Navy.

- Security detachments for the protection of naval property at naval stations and bases.

- Marine officer and enlisted personnel in support of the Department of State security program overseas.

- Marines to perform such other duties as the President may direct.

This Act also requires that the Marine Corps provide rapidly deployable forces for contingency missions in support of the national strategy. The requirement to deploy forces rapidly has resulted in active and reserve components that provide a balance between strategic mobility and tactical capability.

Marine Corps doctrine provides that FMFs will be employed as integrated MAGTFs. The MAGTFs are tailored to accomplish specific missions. The capability in this tailored force is designed to exploit the combat power inherent in closely integrated air and ground operations. Regardless of the size of the MAGTF, it will include four major components:

- Command Element (CE)

- Ground Combat Element (GCE)

- Aviation Combat Element (ACE)

- Combat Service Support Element (CSSE) (including Navy Support Element [NSE])

Within this general structure, there are three basic types of MAGTFs that may be formed in response to operational requirements:

- Marine Amphibious Unit (MAU). The MAU is the smallest air-ground task force (1,800-4,000 Marines and Sailors) and is normally built around a reinforced infantry battalion and a reinforced helicopter squadron. It is commanded by a colonel and employed to fulfill routine forward afloat deployment requirements. The MAU provides an immediate reaction capability for relatively limited combat operations. Because of its limited sea-based sustainability, the MAU will not routinely conduct amphibious assaults, but may be considered the forward element of a larger MAGTF. MAUs are now continuously deployed in the Mediterranean, Western Pacific, and periodically in the Atlantic and Indian Oceans as well as the Caribbean Sea.

- Marine Amphibious Brigade (MAB). The MAB, with 8,000-18,000 Marines and Sailors, is normally built around a reinforced infantry regiment and a composite Marine aircraft group. It is commanded by a brigadier general and is capable of amphibious assaults and subsequent operations ashore. During potential crisis situations, a MAB may be forward deployed afloat for an extended period to provide rapid response. With 30 days of sustainability, the MAB may be supported from its sea base, facilities ashore or a combination of both.

- Marine Amphibious Force (MAF). A MAF is the largest (50,000 plus Marines and Sailors) and most powerful of the MAGTFs and is normally built around a division/wing/combat service support team. However, it may range in size from less than one to several divisions and aircraft wings, together with an appropriate combat service support organization. The MAF is commanded by either a major general or a lieutenant general depending on its size and mission. It is capable of conducting a wide range of amphibious assault operations and, with its 60 days of support, sustained operations ashore. The MAF can be tailored for a wide variety of combat missions in any geographic environment.

The Marine Corps' ability to organize for combat rests on the unique structure of its operating forces, the foundation of which is the FMF. The FMFs are integral parts of the fleets or naval forces to which assigned. They have the status of a fleet "type command" and are subject to the operational control of the Atlantic and Pacific fleet commanders, except for individual and unit training and administrative control, which is retained by the Commandant of the Marine Corps (CMC).

The MAGTFs, the cutting edge of our operating forces, represent potent, combined-arms teams. They are sized and organized to be totally mission capable while adhering to the recognized principles of war. In keeping with the Marine Corps' fundamental mission of amphibious operations, MAGTFs are the landing forces for the fleets. More detailed information on Marine tactical organizations is presented in Appendix A.

Prepositioning

The requirement for the rapid movement of credible forces to distant locations had been a limiting factor in crisis response for many years. In response to this requirement a new dimension to the Marine Corps response posture has been developed. The Maritime Prepositioning Ships (MPS) program is one of the most innovative strategic initiatives of this era. It provides for the rapid commitment of highly capable MAGTFs to crisis areas and combines the best features of our airlift and sealift capabilities. In so doing, it adds a new element to the Maritime Strategy. This contingency response program is one of the most significant developments in recent Marine Corps history. It substantially increases mobility, sustainability and flexibility in the projection of naval power.

In essence, MPS calls for three squadrons of four or five ships loaded with combat equipment, vehicles and supplies to be forward deployed at a designated port or ports and/or deployed at sea. When ordered, Marines comprising a MAB are airlifted to the objective area for linkup with the MPS squadron and embarked combat equipment/supplies. Simultaneously, the brigade's tactical aircraft deploy to a nearby airfield. This brigade, with up to 16,500 Marines and Sailors, can be combat capable and ready to move to designated objectives within 10 days of the arrival of the MPS squadron in the expeditionary area. This preemptive deployment of MPS provides both responsiveness and flexibility for contingency response.

As a result of the establishment of the MPS program, the Marine Corps' capabilities have been significantly enhanced. MPS has added a truly new dimension to our projection of force. MPS squadrons can steam to many of the most critical contingency areas within 7 days. Once ashore, a MAGTF packs the punch and tactical mobility to quickly strike against assigned objectives. This integrated, combined-arms team is already trained and organized as a ready "force package." The MAGTF arrives with 30 days of sustainability so that no strategic lift is required to provide sustainability during the first 30 days ashore.

Our nation is dependent upon the seas to provide us with both the natural resources vital to our economy and the lines of communications to our allies. The national leadership has endorsed and strenuously supported programs calling for maritime strength which will ensure a decisive degree of superiority at strategic choke points throughout the world. Maritime prepositioning operations are a new element in the Maritime Strategy. MPS is now a reality that provides a new flexibility in the arsenal of options available to the NCA.

Another strategic mobility enhancement is prepositioning of selected Marine combat equipment and supplies on land in Norway. This DOD-directed program is the Marine Corps' only land prepositioning project and is based upon a bilateral agreement signed by the U.S. and Norway in January 1981.

The program involves the prepositioning of selected combat equipment and 30 days of supply. Included are low maintenance, high consumption ground munitions, subsistence items, selected principal end items (PEIs), construction and barrier materiel, selected medical supplies and repair parts.

This program will reduce our response time to the critical northern flank of NATO from weeks to days. The Norway force is a MAGTF unit, specifically tailored for this contingency in a cold weather environment. It is a versatile, formidable force of approximately 13,000 Marines and Sailors and over 150 aircraft. Since each MAGTF is task organized to accomplish the mission assigned, the Norway MAGTF meets the unique requirements of the Norway mission, and, consequently, is different from the previously mentioned MPS squadron MATGF. The Norway prepositioning program has been designed to provide rapid deployment to a vital area and ally. The program sends a clear signal of U.S. commitment without any requirement to post a single Marine on Norwegian soil.

In short, prepositioning provides the following:

- Rapid global response using minimal strategic lift

- Superior combat power

- Sustainability

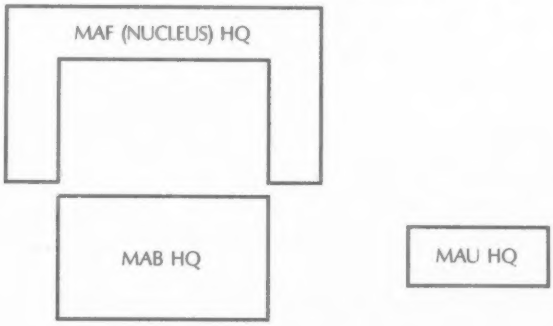
The ability to combine forward-deployed forces, rapidly-deployable air-lift-configured MAGTFs using prepositioned combat equipment and supplies, and amphibious MAGTFs is a crisis response capability that is uniquely Marine.

Deployment Issues

In order to respond quickly to crises, the Marine Corps must be able to rapidly expand its combat power in a threatened area by building upon forward deployed forces to form larger MAGTFs. This challenge requires both the traditional readiness of our ground combat, aviation combat and combat service support forces and a new level of command element responsiveness. It also requires that we develop a framework for forming and employing larger MAGTFs from smaller MAGTFs because we intend to employ our forces as MAFs even though amphibious lift limitations may force us to initially deploy as MABs.

As a first step towards achieving this capability, the Marine Corps has established permanent, standardized headquarters for its MAGTFs. Included in this program are thirteen headquarters: four MAU, six MAB, and three MAF (nucleus). Implementation of this plan, which began in July 1983, will be completed in 1990. This "building block" relationship between the MAF, which is only a nucleus headquarters in peacetime, and the MAB headquarters, which is manned as a fully operational headquarters at all times, is displayed in figure I-1:

Figure I-1: Permanent MAGTF Headquarters Concept



This means that the MAF (nucleus) headquarters can concentrate on planning MAF-size operations and training to be the core of a fully operational MAF headquarters while the MAB headquarters can focus on preparing for rapid deployment, either independently or as part of a MAF, and conducting exercises. This relationship eliminates the requirement for full-time operational MAF headquarters. MAU headquarters, meanwhile, are separate entities which, like the MAB headquarters, are fully manned and operational in peacetime. Unlike the MAB headquarters, however, they have no "building block" relationship to any MAB or MAF headquarters and are primarily tasked with preparing for and conducting MAU forward deployments.

The second step toward achieving the capability to rapidly form and employ larger MAGTFs from smaller ones involves the creation of "composite MAGTFs" by combining the forces of two or more other MAGTFs. The term recognizes that in an expeditionary situation we must be prepared to transition separately deploying smaller MAGTFs into a larger, composite MAGTF.

Composite MAGTFs may be composed of any combination of forward deployed or mission deployed amphibious forces as well as land and maritime prepositioning forces. The specific combination used will depend upon a number of factors including the time, distance and strategic mobility resources available.

Our emerging framework for forming composite MAGTFs does not prescribe textbook solutions, but rather emphasizes the flexibility of the MAGTF structure. By using all forces available (to include forward deployed MAUs, MPS forces, augmentation forces and headquarters "building blocks"), the MAGTF commander can tailor his force to efficiently and effectively complete his assigned mission.

The permanent MAGTF headquarters concept and the composite MAGTF concept are compatible innovations designed to increase our operational capability to rapidly deploy and employ forces. Together, they provide a responsive means for maintaining effective command and control as we deploy, and subsequently employ, our most available warfighting organizations to the crisis at hand.

The Marine Corps Today

Our combat readiness has never been better. The Corps is trained and equipped for the most demanding of assignments--from countering state-sponsored terrorism, to responding to low intensity conflicts, to meeting high intensity, large scale, global commitments. With the continued support of the national leadership, the Marine Corps will maintain and hone this readiness and our unique capability to respond to national security needs across the entire spectrum of conflict. The presence of amphibious forces, either routinely deployed or in response to a crisis, provides visible, measured support to deter or prevent escalation of the crisis. Should subsequent force be required, Marines are prepared to rapidly provide the response directed.

Measured in terms of structure, training, equipment, mobility, readiness, sustainability and the attitude of the individual Marine, the Corps provides the national defense with its most capable and flexible resource.

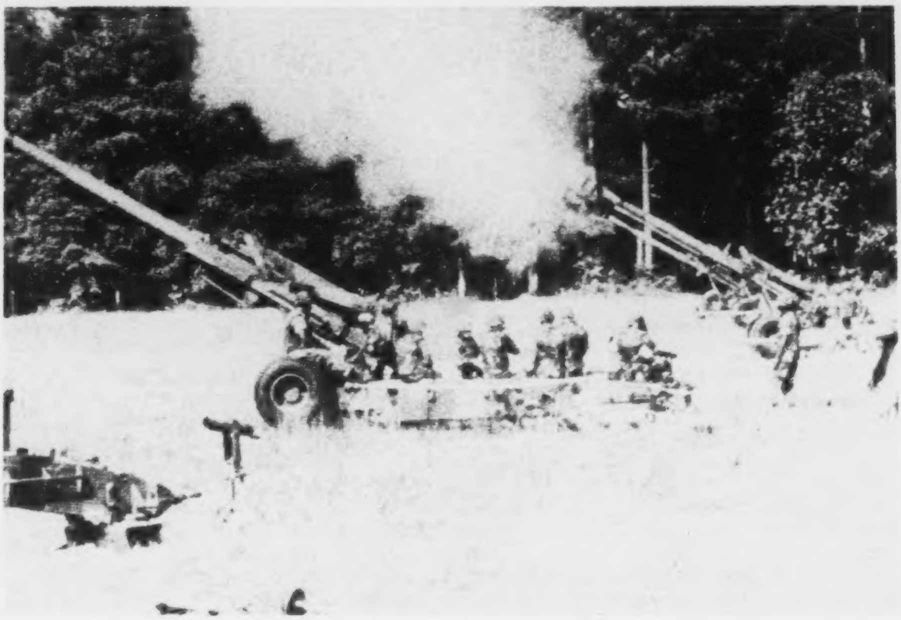
Our infantry battalions continue to be enhanced with new and improved weapons to increase their organic firepower. New acquisitions include the M249 squad automatic weapon (SAW), the MK-19 40mm grenade launcher, and the M252 81mm mortar.

The Marine Corps' antiarmor capability is also being improved. FY-87 is the first year for procurement of the TOW-2A missile, the most capable and lethal missile in the TOW family. The TOW-2A is capable of defeating all current threat armor. The Dragon, a medium antiarmor weapon, is undergoing a product improvement which will add a combined day/night tracking device and increase missile range and warhead penetration. The light antiarmor weapon (LAW), AT-4, will provide an antiarmor capability to the individual Marine.

The Light Armored Vehicle (LAV) was developed to fill a requirement for increased firepower and tactical mobility within the Marine Corps. The LAV battalion contains six vehicle configurations: the basic LAV-25, and mortar, recovery, command and control, logistics and antitank variants. A LAV air defense vehicle is under development.

The M60A1, the Marine Corps' main battle tank, is reaching the end of its service life. The M1A1 tank, which has been approved as the replacement for the M60A1, will provide the Marine Corps a state of the art armor capability. First deliveries will occur in FY-90 and IOC is FY-90.

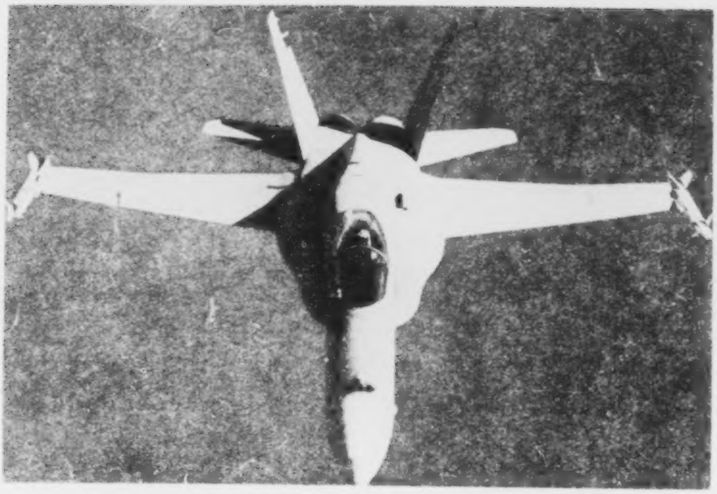
The modernization of Marine Corps artillery is continuing with the activation of additional self-propelled 155mm batteries for our general support artillery battalions. All direct support artillery battalions are now equipped with 155mm howitzers, and the M198 howitzer is included in the prepositioning programs. Our target acquisition capability has been enhanced by the fielding of the AN/TPQ-36 counterfire radar. An additional enhancement is the Navy and Marine Corps joint program for a remotely piloted vehicle (RPV). RPV units will provide the MAGTF with target acquisition, reconnaissance and radio relay capabilities. An interim ground-launched short range RPV system will be fielded in FY-87.



Improvements in the aviation combat element (ACE) of the Marine Corps have kept pace with the ground combat element (GCE). With the support of Congress, the introduction of the AV-8B will continue this year. This unique aircraft is compatible with our forward basing strategies and complements the flexible capabilities of our Corps. The AV-8B builds on the proven concepts of vertical/short take off and landing (V/STOL). Our first AV-8B squadron became operational last year and we have confirmed a pressing need for a twoseat trainer. The largest pilot transition requirement commences in FY-87 and will continue for the next few years. The timely introduction of this trainer, the TAV-8B, is critical to the safe and efficient conversion of our remaining light attack force.

The Marine Corps continues acceptance of the F/A-18. Our aircrews report that the F/A-18 is both a responsive and agile fighter, and a highly accurate attack platform. The first deployment of the F/A-18 as a part of the unit deployment program (UDP) occurs during July 1987.

During FY-86, 22 AH-1W attack helicopters were added to the Marine Corps. The acquisition of the AH-1W enables the Marine Corps to reduce existing inventory shortfalls as well as upgrade its capability. The T-700 engine in the AH-1W provides Marine attack helicopters the ability to operate anywhere in the world. The Hellfire missile system became operational with the introduction of the AH-1W. The incorporation of a night vision goggle-compatible cockpit lighting system gives the AH-1W an enhanced night capability.



Complementing improvements in waterborne assault capability in the 1990s, we have supported the development of the highly survivable MV-22A Osprey. As the replacement for the aging assault transport helicopter, this tilt-rotor aircraft will lift troops and small tactical vehicles into combat. Operating at speeds up to 250 knots at vastly improved ranges, Osprey will introduce greatly improved speed and flexibility to the assault.

The CH-53E, the most powerful helicopter in the free world, will complement the Osprey by providing the required heavy-lift capability into the 21st century. Its 16-ton lift capacity is necessary to enhance the operational mobility of the M198 155mm howitzer, the LAV, and other MAGTF heavy equipment.

We are continuing to restore and enhance the ability of our Force Service Support Groups (FSSGs) to support and maintain amphibious operations at all levels of MAGTF configuration. The manning level of the FSSGs is being increased to support all levels of MAGTF operations. Our reserve component combat service support force is being enhanced as well.

Under the umbrella of the Marine Corps Field Logistics System (FLS) our strategic mobility and sustainability are being improved through the development of components that are compatible with the 8'X 8' X 20' container in standard use on modern containerships. As part of the system we are procuring and fielding intermediate size containers called pallet containers (PalCons) and quadruple containers (QuadCons). The PalCon is a pallet container with a capacity of 1,000 pounds while the QuadCon is a quadruple container with a capacity of 7,500 pounds. Both are waterproof and can be connected into arrays that are compatible with standard materiel handling equipment used with land, sea and air transportation. Other equipment is also being designed for use with standard shipping containers.

The Logistics Vehicle System (LVS) consists of a powered front-body unit and four interchangeable, rear-body trailer variants. This vehicle system will be capable of carrying standardized containers and heavy cargo, and will provide a necessary and significant improvement in tactical mobility while achieving a more supportable logistics vehicle fleet. The LVS became operational during FY-86 with more than 1,600 projected to be in service by the end of FY-88.

The 5/4-ton High Mobility Multipurpose Wheeled Vehicle (HMMWV) will be the primary light tactical vehicle for combat and combat support units. Its functions will include: troop and weapons transport; weapons platform; reconnaissance; fire support; medical evacuation; and command, control and communications applications. Fielding will continue through FY-88 on the initial contract and begin again in FY-91 to supply needed replacement vehicles.

New command and control systems to assist the Marine on the battlefield are in various stages of development and fielding. These systems provide improved command and control support to cope with the increased tempo and complexity of the modern battlefield, enabling the commander to bring together our diverse combat capabilities at the decisive time and place.

One of these systems is the Position Location Reporting System (PLRS). PLRS is an automated tactical command and control system that provides the user with accurate, real-time position locations. The Marine Integrated Fire and Air Support System (MIFASS) is another tactical command and control system designed to provide the Marine commander automated support for timely and efficient integration of close air support, artillery and naval gunfire.

Also in Program Objective Memorandum (POM) 88/89-92 is the Tactical Air Operations Module (TAOM), an important centerpiece for our air command and control modernization program. The number of TAOMs can be tailored to the size of the ACE in the MAGTF. The TAOM reduces set-up time and lift requirements, and requires fewer personnel than the currently fielded system. Capitalizing on a unique modular and redundent architecture, the TAOM provides a significant improvement in reliability that provides continuous availability for the MAGTF.

Our ability to produce and disseminate intelligence to tactical commanders is developing rapidly under the Marine Air-Ground Intelligence System (MAGIS). The Intelligence Analysis Center (IAC), the "heart" of MAGIS, became operational in 1986. Other items being developed include the All Source Imagery Processor (ASIP), a soft-copy imagery exploitation system which exploits electro-optical, infrared, and radar imagery in near real-time from tactical and national sources. Our signals intelligence and electronic warfare systems will be modular, transportable and semiautomated. They will intercept, identify, locate and jam threat signals from both airborne and ground based platforms as well as analyze and report intelligence information from tactical and national sources.

We remain dedicated to improving the ability of tactical commanders to exploit national intelligence capabilities through the Tactical Exploitation of National Capabilities (TENCAP) program. TENCAP assists in developing the systems, procedures, and force structure required to accomplish this vital function. It also educates and exercises our operational commanders in accessing those national systems which complement tactical reconnaissance.

The Marine Corps must be capable of rapidly deploying to respond to crises or contingency situations. We plan our embarkation process manually; however, we are currently developing an automated information system, called the Computer Aided Embarkation Management System (CAEMS), which will use a microcomputer and state of the art graphics. This system will enhance the Marine Corps' capability to combat-load ships and aircraft with each MAGTF's complement of supplies and equipment by providing automated embarkation plans.

We have made significant strides in waterborne tactical mobility. Loaded on the LSD-41 and other well-deck ships, and launched from over the horizon (OTH), the 40-knot-capable Landing Craft Air Cushion (LCAC), in conjunction with the helicopter and the MV-22A Osprey will reduce the risk to the amphibious force while enhancing the surprise, mass and maneuverability of the assault force. The initial operating capability (IOC) for the first LCAC squadron home ported at Camp Pendleton, California, was 1986. To date, four craft have been delivered.

The Commandant has consistently stated that the Marine Corps' top priority is readiness. The readiness of our FMF commands to respond rapidly throughout the entire spectrum of conflict continues to be the Marine Corps' top priority. Our emphasis on readiness is apparent in the array of MAGTFs which are fully combat ready and prepared for any contingency.

Several years ago the Marine Corps completed an extensive review of the FMF special operations capabilities. It was determined that MAGTFs were uniquely qualified to conduct a broad spectrum of special operations in a maritime environment, particularly when the situation called for the integration of helicopterborne or waterborne forces from the sea.

Realizing that a significant capability for special operations was already present within our MAGTFs, the Commandant, at that time, directed that an aggressive effort be undertaken to optimize that capability. CG FMFLant was tasked to undertake a pilot program, focusing on enhancement of the capability of forward-deployed MAUs to conduct appropriate special operations. This effort has evolved into the present Marine Amphibious Unit (Special Operations Capable) (MAU(SOC)) program.

It is not our intent to establish new units which would unnecessarily duplicate special purpose organizations such as Special Forces or SEALs. We recognize the unique character and importance of such special organizations, and it is our intent to work toward ensuring that Marine Corps special operations capabilities are complementary. Our initial objective is to ensure that our MAUs, which are routinely deployed with the fleet, are fully capable of conducting appropriate operations by themselves or, in conjunction with other special purpose organizations.

In summary, as Marines, we have the unique capability, unmatched anywhere in the world today, to make a forcible entry from the sea with a fully integrated, mission-tailored, combined arms and self-sustaining team. Along with the Navy we provide the amphibious ready forces that enable our country to keep the qualitative edge needed to provide a decisive, credible response in global crises.

CHAPTER II
RESOURCE ALLOCATION OVERVIEW
(Amended Version, 24 February 1988)

Background

This chapter addresses current Marine Corps' planning and resource allocation. After reviewing the Marine Corps requirements determination and resource allocation process, it provides an overview of the Amended FY-88/89 Biennial Budget, including dollar allocations to DOD as well as Marine Corps' allocations within each appropriation.

Introduction

The DoD Planning, Programming and Budgeting System (PPBS) is the framework within which decisions are made that shape the character and capabilities of our forces. Plans emerge from the totality of operational requirements, treaties, experience, existing plans and formal guidance. Programs supply resources to the most essential capabilities contained in the plans. Budgets finalize allocation of resources to the programs.

Decisions that have impact on acquisition programs occur both within the systems acquisition process and in the PPBS. The relationship between these processes is fundamental to understanding how equipment is selected, resourced, and procured. The requirements determination process, as the generator of required capabilities to be included in service plans, ultimately results in the identification and validation of the need for a new piece of equipment. The PPBS provides access to the resources and fiscal wherewithal for the acquisition process to work. In turn, the systems acquisition process depends on the PPBS to provide the planning, programming, and budgeting of the fiscal profile into which the acquisiton programs are fitted for annual presentation to Congress.

The Deputy Chief of Staff for Requirements and Programs is responsible for development of the Marine Corps' input to the Department of the Navy Program Objective Memorandum (DON POM). The Marine Corps POM is developed in response to the Defense Guidance (DG) and Marine Corps Mid-Range Objectives Plan (MMROP). In addition to these documents, the POM incorporates the goals and objectives expressed during the program development cycle by the Commandant of the Marine Corps and the Secretary of the Navy's DON Consolidated Planning and Programming Guidance (DNCPPG).

Requirements Identification

Headquarters, Marine Corps and the Marine Corps Combat Development Command (MCCDC) execute mission area analyses (MAAs) (see figure II-1) to identify deficiencies between required and existing capabilities for each mission area and to support the development of the Marine Corps Long Range Plan (MLRP), the MMROP and the POM. The MLRP assesses the period of time 20-30 years in the future: it describes the operational, organizational and materiel concepts that the Marine Corps intends to implement in order to carry out its projected roles and missions. The MMROP translates long-range plans into more definitive goals and objectives that should be accomplished in the 5 years of the POM, plus the next 10 years. The Marine Corps' POM responds to the capabilities specified and ranked in order of need in the MMROP and the fiscally influenced Master Plans that are drawn annually from the parent MMROP.

The MLRP and the MMROP map the operational direction of the Marine Corps. After MAAs have determined deficiencies and before material resolutions are proposed, MCCDC ensures that those capability shortfalls are reviewed for potential solutions through modification of doctrine, tactics, techniques, training and organization (see figures II-2 and II-3). The deficiencies in material solutions are then translated into requirements documents, required operational capabilities (ROCs), which are forwarded to the Marine Corps Research, Development, and Acquisition Command (MCRDAC) and may eventually compete for incorporation in the POM.

At this point MCRDAC seeks an off-the-shelf, nondevelopmental commercial item to fill the requirement. If one does not exist and another service has a similar requirement, MCRDAC will join with the development or procurement effort conducted by the other service.

FIGURE II-1: SPONSORS AND MISSION AREAS

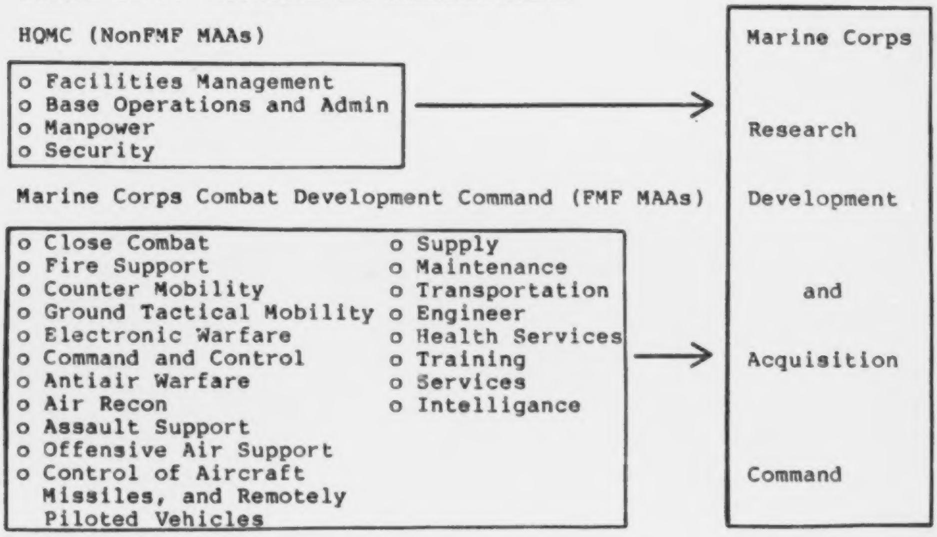
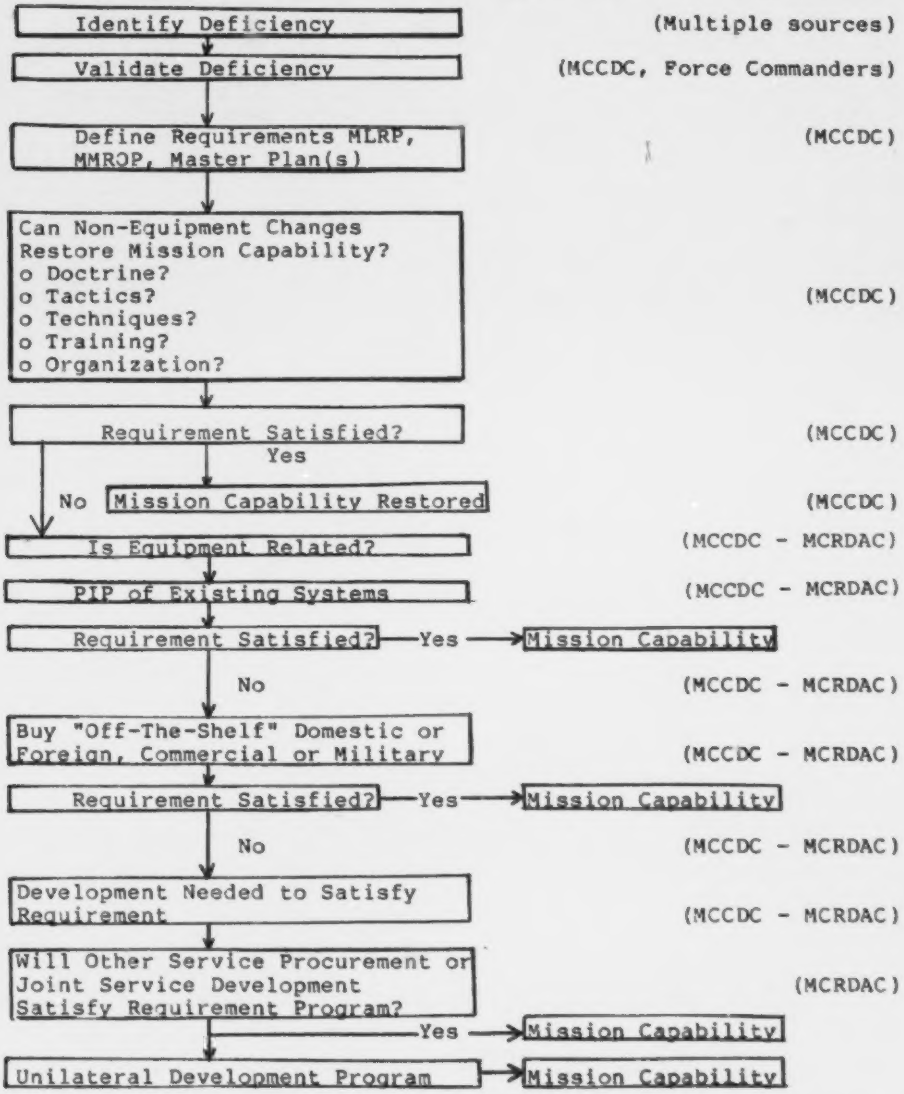


Figure II-2: Programming for New Marine Corps Requirements



Note: Figures II-1 and II-2 are adapted from "The Marine Corps System Acquisition Process" by Dave Brown and Tom Mulkerin in The Amphibious Warfare Review, August 1985.

If, however, another service program or a joint development program does not fill a unique requirement, then the Marine Corps will conduct a unilateral development program. This last course of action is usually very costly. Therefore, CG MCRDAC, who is responsible for initiating and coordinating Marine Corps policy for the systems acquisition process, will only initiate a unilateral development program if there is no other way to meet requirement.

POM Building

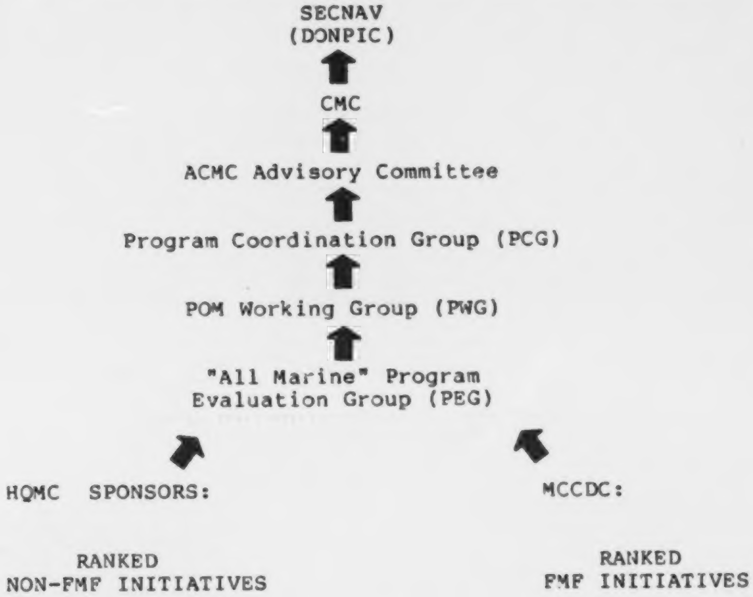
Regardless of where the development and acquisition effort takes place, solutions requiring resources must be competed as initiatives in the POM process. That process is initiated with an updated Master Plan that highlights the deficiencies identified by the Force Commanders, the Marine Corps Combat Development Command, and Headquarters, Marine Corps. The Master Plan will then guide the program development effort.

Figure II-3: Overview of Planning, Programming and Budgeting System (PPBS)

- o Planning
  - View the threat
  - Develop strategy and policy
  - Develop force planning guidance
  - Present required capabilities in the MMROP in order of priority within and between mission areas
- o Planning - Programming Bridge
  - Develop fiscally influenced master plans
- o Programming
  - Translate master plan content into achievable program packages in accordance with planning priorities
  - Apply fiscal and resource constraints
  - Develop the FYDP
- o Budgeting
  - Focus on submission to Congress
  - Review the executability of programs
  - Emphasize justification of programs formulated with detailed back-up
  - Execution of expenditures for programs

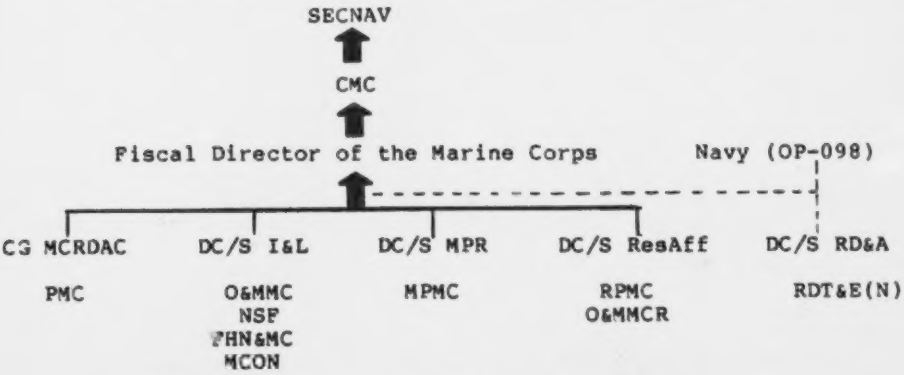
When program initiatives are submitted into the PPBS/POM process, these initiatives are prioritized with respect to all other program initiatives submitted by sponsors. Initiatives are considered over and above an artificially low funding level set for the "core" programs to force discrimination and identification of lower priority programs. These lower priority programs are then required to recompete for funding with all other identified deficiencies and new initiatives. Program priorities within the POM process are established using decision analytical tools, assessment of operational need, and cost-benefit analysis so that the programming committees can objectively establish priorities among unlike programs (see figure II-4). FMF program priorities are established initially through a Program Evaluation Group (PEG) held by MCCDC with MCRDAC participation. NonFMF program priorities are established initially through a NonFMF PEG held at Headquarters. The top programs from the initiative prioritization process that can be accommodated above the core and within the established funding ceiling form the new Marine Corps POM. This POM is then submitted for consolidation with the Navy POM and becomes the DON POM after Secretary of the Navy review and approval. The DON POM (and other service POMs) are then reviewed in detail by the Defense Resource Board (DRB) and approved for incorporation in the Defense Budget.

Figure II-4: Structure for POM Development and Review



The most mature 2 years of the POM then go through extensive reviews by the Navy Comptroller and Office of the Secretary of Defense (OSD) before they transition into the Marine Corps' portion of the President's Budget. At that time they become the management responsibility of the Fiscal Director of the Marine Corps and appropriation sponsors (see figure II-5).

Figure II-5: Marine Corps Appropriation Sponsors



Programs that are included in the President's Budget must have reached Milestone III, production approval. After programs are approved for service use, CG MCRDAC is responsible to the Commandant for the actual acquisition of the equipment and for bringing it into the Marine Corps inventory.

Financial Resources

Financial resources are the funds that are programmed, budgeted, obligated, outlaid and finally expended to cover service investment and operational requirements. Total financial resources allocated to DoD (and to each service) are called the Total Obligational Authority (TOA). The DOD PPBS establishes the ground rules for the allocation of the DOD TOA. Displayed below is the DOD TOA for all services from FY-86 through the Amended FY 88/89 Biennial Budget:

	FY-86	FY-87	FY-88	FY-89
$ Billion	281.2	279.5	283.2	290.8

Directly following in figures II-6 and II-7 are charts which display the percentage of DOD funds budgeted by each service/agency. This TOA is subsequently divided into appropriations.

DEPARTMENT OF DEFENSE DOLLARS

FIGURE II-6: FY-88

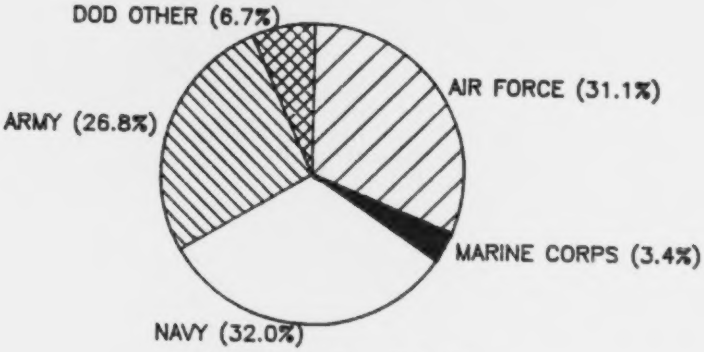
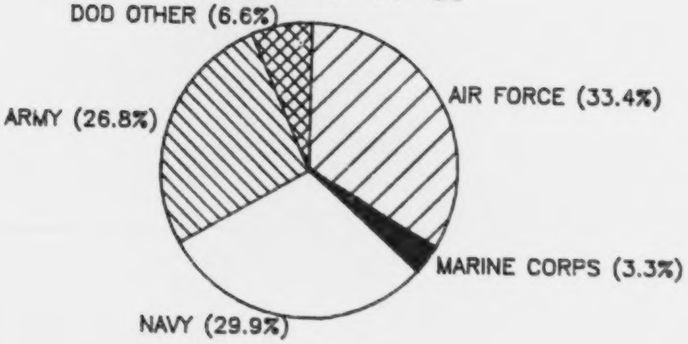


FIGURE II-7: FY-89



Appropriations

An appropriation is the legal apportionment by an act of Congress to incur obligations for specified purposes and to make payments from the Treasury of the United States. There are three types of appropriations in the Marine Corps:

- Annual
    - Military Personnel
    - Operation and Maintenance
- Multi-year
    - Procurement
    - Military Construction
    - Family Housing
- Revolving
    - Stock Fund

Funds may be expended only for the purpose for which appropriated. Following are the USMC appropriation titles with a brief synopsis of what each provides:

- Military Personnel, Marine Corps (MPMC) - For pay, allowances, individual clothing, subsistence, interest on deposits, expenses for organization movements and expenses of temporary duty travel between permanent duty stations.

- Reserve Personnel, Marine Corps (RPMC) - For pay, allowances, clothing, subsistence, gratuities, travel, and related expenses for personnel of the Marine Corps Reserve on active duty.

- Operation and Maintenance, Marine Corps (O&MMC) - For expenses necessary for support of the Fleet Marine Force (FMF), civilian employee pay, travel and transportation, training, consumable supplies, recruiting and advertising, base operations and base communications.

- Operation and Maintenance, Marine Corps Reserve (O&MMCR) - For expenses necessary for the operation and maintenance, including training, organization and administration of the Marine Corps Reserve; repair of facilities and equipment; hire of passenger motor vehicles; travel and transportation; recruiting; procurement of services, supplies and equipment; and communications.

- Procurement, Marine Corps (PMC) - For expenses necessary for the procurement and manufacture of ammunition, weapons and tracked combat vehicles, guided missiles and equipment, communications and electronics, support vehicles, engineer and other equipment and spares and repair parts.

Navy appropriations of which Marine Corps programs its share:

- Military Construction, Navy (MCON) - For acquisition, construction and installation of temporary or permanent public works, naval installations and facilities for the Navy and the Marine Corps.

- Family Housing, Navy and Marine Corps (FHN&MC) - For the construction, maintenance, repair and design of Navy and Marine Corps housing and ancillary facilities required at bases and stations world-wide.

- Navy Stock Fund (NSF) - For the procurement of stock funded War Reserve Materiel required to achieve a materiel support posture to provide war reserve asset levels and inventory objectives for combat-critical items. Examples include: supplies, minor items of equipment, and parts used in the manufacture, assembly or repair of items of equipment.

- Military Construction Navy Reserve (MCNR) - For constructioin, acquisition, expansion, rehabilitation, and conversion of facilities for the training and administration of the reserve components of the Navy and Marine Corps.

A display of the TOA in millions of FYDP dollars allocated to each of these appropriations is displayed below:

	FY-86	FY-87	FY-88	FY-89
MPMC	5,161.1	5,438.8	5,542.8	5,716.2
RPMC	283.0	277.3	295.4	315.7
O&MMC	1,575.6	1,841.4	1,795.3	1,792.0
O&MMCR	54.4	64.0	69.5	77.5
PMC	1,531.4	1,438.5	1,295.6	1,157.3
NSF(MC)	35.9	.8	26.8	36.3
FHMC	126.9	146.1	161.6	157.3
MCON	226.1	260.1	314.4	286.2
MCNR	0	11.6	23.4	4.7
TOTAL	8,994.4	9,478.6	9,524.8	9,543.2

In addition to MCON, MCNR FHN&MC and NSF the Marine Corps also receives funding support through the following Navy "blue dollar" appropriations:

- Aircraft Procurement, Navy (APN)
- Research, Development, Test and Evaluation, Navy (RDT&EN)
- Other Procurement, Navy (OPN)
- Military Personnel, Navy (MPN)
- Reserve Personnel, Navy (MPN)
- Operation and Maintenance, Navy (O&MN)
- Operation and Maintenance, Navy Reserve (O&MNR)
- Weapons Procurement, Navy (WPN)

The allocation to the appropriations of this TOA is shown below (see figures II-8 and II-9).

USMC APPROPRIATIONS COMPOSITION

FIGURE 8: FY-88

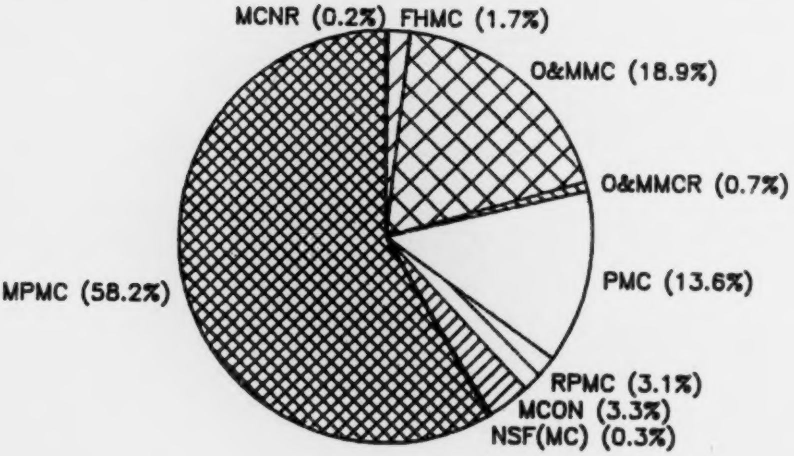
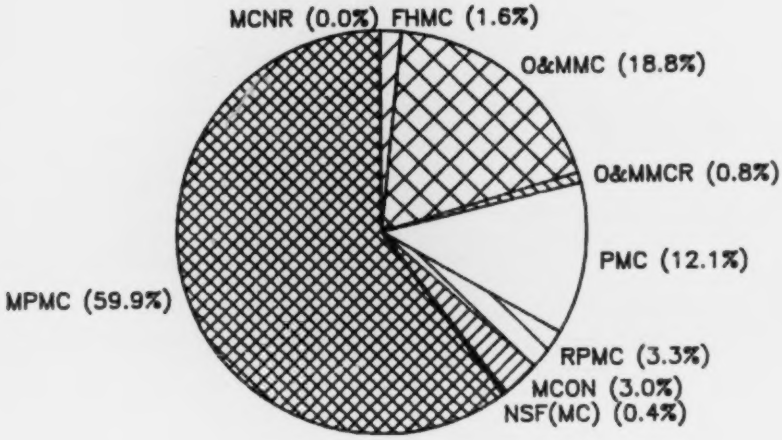


FIGURE 9: FY-89



The Marine Corps is manpower intensive as illustrated in these charts. The personnel pay accounts, active duty, reserve and civilian, total approximately 68 percent of the total TOA.

Figure II-10 displays the Marine Corps' resources and shows the comparison between investment and consumption accounts. The preponderance of the investment dollars are PMC. The figure includes PMC, MCON, MCNR and the investment portion of our family housing. Figure II-11 depicts how the Marine Corps PMC is allocated to budget activities for the Amended FY 88/89 Biennial Budget.

FIGURE II-10:
INVESTMENT VS CONSUMPTION, USMC
FY-88 AND FY-89

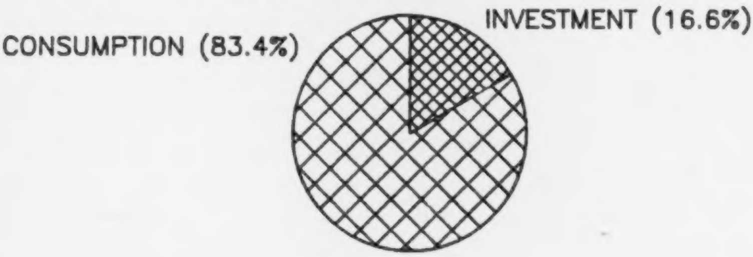
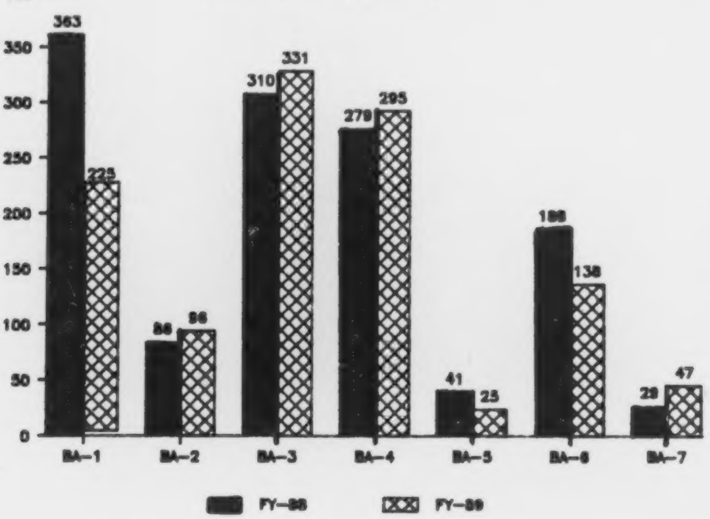


FIGURE II–11: PMC TOTAL BY BUDGET ACTIVITY

FYDP $ (MILLIONS)



BA-1: Ammunition
BA-2: Weapons and Combat Vehicles
BA-3: Guided Missiles and Equipment
BA-4: Communications and Electronics Equipment
BA-5: Support Vehicles
BA-6: Engineer and Other Equipment
BA-7: Spares and Repair Parts

Large portions of the decrease in BA-1 from FY-88 to FY-89 are decreases in 155 mm, mortar and training ammunition. The decline in spending for BA-6 includes drops in procurement of the light and heavy terrain cranes and the completion in FY-88 of the wet gap bridging system procurement.

CHAPTER III

PROGRAMS FOR IMPROVED MARINE AIR-GROUND TASK FORCE (MAGTF) CAPABILITIES

Part 1

Ground Combat Element

Introduction

The GCE of a MAGTF is a task organization tailored to accomplish a particular mission. It is constructed around an infantry unit and varies in size from a reinforced battalion to one or more reinforced Marine divisions. It includes the full range of ground combat systems.

This section is composed of those program areas associated with the mission area of ground combat.

LIGHT ANTIARMOR WEAPON, AT-4

DESCRIPTION: The AT-4 is a shoulder-fired rocket launcher with a high explosive antiarmor warhead. This weapon provides the individual Marine with an antiarmor capability. The 84mm AT-4 is a man-portable, single shot, throwaway weapon that will replace the current 66mm Light Antiarmor Weapon (LAW).

PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity	14,498	19,617	16,212	19,165	17,321	-	5,713

WHY IS IT IMPORTANT? The AT-4 will provide individual Marines an antiarmor capability on the battlefield. Although heavier than the present LAW, the AT-4 will provide greater lethality and penetration.

PROGRAM STATUS: Procurement of the AT-4 began in FY-86 and will continue until the current LAW is replaced.

DEVELOPER/MANUFACTURER: Honeywell

COMBAT EXCAVATOR

DESCRIPTION: The combat excavator is an armored combat earthmover designed to support the MAGTF. The combat excavator will possess the ability to rapidly move overland and to cross inland water obstacles. It will provide crew protection from hostile fires not currently available in Marine Corps engineer excavation equipment. It will provide significant improvements in survivability, mobility and countermobility. It will also provide aviation units with capabilities for rapid runway repair and assist in the clearance of unexploded submunitions.

PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity	-	-	-	-	17	88	92

WHY IS IT IMPORTANT? The Marine Corps currently relies on commercial type construction equipment for its combat engineer battalions. This equipment is not responsive to the increased mobility of the MAGTF or to combat engineer support throughout the battlefield. The combat excavator provides a wide range of combat engineer capabilities. It will supplement or replace several pieces of construction equipment and enhance combat engineer responsiveness.

PROGRAM STATUS: The Marine Corps will employ an off-the-shelf nondevelopmental item acquisition strategy. This strategy will provide for an operational test dig-off for all potential systems.

DEVELOPER/MANUFACTURER: TBD

M1A1 MAIN BATTLE TANK (MBT)

DESCRIPTION: The M1A1 MBT is an improved version of the M1. The M1A1 weighs 63 tons but will exert only 13.7 pounds per square inch of ground pressure. It will be powered by a 1,500 horsepower air-cooled, regenerative turbine engine. The M1A1 is armed with a 120mm stabilized cannon, and has improved armor and nuclear, biological and chemical (NBC) protection.

PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity	-	-	LLI	66	107	123	163

WHY IS IT IMPORTANT? The M60A1, our current MBT, is reaching the end of its service life. Its replacement, the M1A1, is the most advanced and survivable MBT available. The M1A1 program represents a major upgrading of the armor capabilities within the Marine Corps. Increased armor protection, improved fire control, greater speed and agility, and increased firepower will enhance the combat capabilities and survivability of this MBT.

PROGRAM STATUS: The M1A1 was approved for service use and procurement by the USMC in February 1985. IOC is scheduled for FY-90.

DEVELOPER/MANUFACTURER: General Dynamics

REMOTELY PILOTED VEHICLE (RPV)

DESCRIPTION: This program enhances the Marine Corps' ability to meet requirements to provide target acquisition, battlefield surveillance, reconnaissance, and radio relay capability in support of the MAGTF. The Marine Corps has operated a single Mastiff III RPV system for the past three years in order to refine requirements and develop Navy and Marine Corps Concepts of Employment.

An RPV system is comprised of eight air vehicles, associated payload packages, a ground control station (GCS), a portable control station (PCS), remote receiving station and launch/recovery subsystems.

PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity	1	2	3	3	4	4	4

WHY IS IT IMPORTANT? The Marine Corps' interest in developing an RPV capability dates from the 1975 Marine Corps Mid-Range Objectives Plan which identified a need for an unmanned aerial vehicle system that could be used to accomplish target acquisition, reconnaissance and radio relay. The RPV provides those capabilities in high threat scenarios where the use of expensive manned aircraft and highly trained crew members may be imprudent. The use of RPVs also releases manned platforms for employment in missions requiring human judgement and expertise.

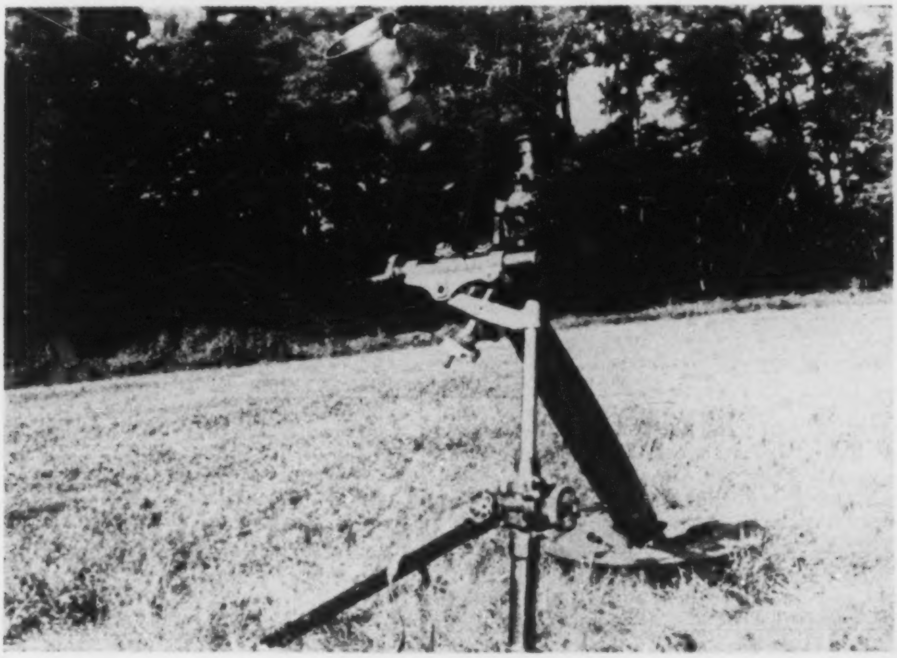
PROGRAM STATUS: The Marine Corps and the Navy have formed a joint office, with the Navy as Executive Service, for the procurement of RPV systems within the DON. The program office is staffed by both Navy and Marine Corps personnel. Under the Interim Ground Launched Short-Range Program, authorized by Secretary of the Navy in July 1985, five Pioneer RPV systems will be procured prior to FY-88. Three of these systems will be fielded by the Marine Corps, thereby establishing a minimum essential capability (MEC). Three RPV companies, one in support of each MAF, will operate the Marine Corps RPV systems. IOC for the follow-on ground launched short-range RPV is FY-88. Current plans call for acquisition of 18 RPV systems to satisfy Marine Corps requirements.

DEVELOPER/MANUFACTURER: Interim - AAI Corporation, Cockeysville, Maryland

M252 IMPROVED 81mm MORTAR

DESCRIPTION: The M252 is a crew-served, lightweight mortar which is highly accurate and has a greater range than the current 81mm mortar.

PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity	50	350	264	-	-	-	-

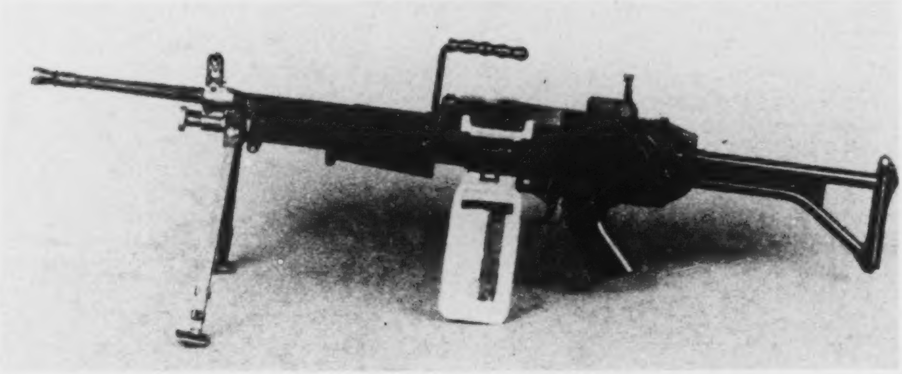


WHY IS IT IMPORTANT? The M29A1 81mm mortar is very old and must be replaced. The M252 is a proven, more capable mortar that will provide increased range (4,500 meters to 5,650 meters), greater lethality and increased portability.

PROGRAM STATUS: The Marine Corps approved the weapon for service use and procurement and will replace all M29A1 mortars on a one-for-one basis. The M252 will also be mounted in the mortar variant of the LAV.

DEVELOPER/MANUFACTURER: Royal Ordnance Factories, London, England

M249 SQUAD AUTOMATIC WEAPON (SAW)



DESCRIPTION: The M249 SAW is a gas operated, magazine or belt fed, light machine gun that will replace the M16 as the automatic rifle in the fire team. It will increase the firepower of Marine infantry units, with a capability of engaging point targets out to 800 meters, firing the improved, NATO standard 5.56mm cartridge (M855). The SAW will also be fielded throughout all combat, combat support and combat service units, as well as Marine barracks.

PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity	8,024	1,000	1,039	572	-	-	-

WHY IS IT IMPORTANT? The Marine Corps needs a weapon which will provide aimed and suppressive fire at extended ranges. The M249 provides a sustained rate of fire of 85 rounds/minute (1,000 rounds/minute (cyclic)) and has a maximum effective range of 1,000 meters against area targets. The procurement of this weapon will put the Marine Corps on an equal footing with threat forces equipped with RPK and PK machine guns.

PROGRAM STATUS: Procurement of the weapon began in FY-82 and will continue through FY-89. A product improved buffer that will be retrofitted to the SAW will be procured as part of the FY 88/89 SAW production contracts.

DEVELOPER/MANUFACTURER: Fabrique Nationale of Herstal, Belgium

MK-19 MOD-3 40mm GRENADE LAUNCHER

DESCRIPTION: The MK-19 is a crew-served, automatic grenade launcher capable of engaging light armored vehicles and infantry out to 1,600 meters. The weapon weighs 75.6 pounds and will mount on the M3 machine gun tripod, the HMMWV and the 5-ton truck. It will also be used on the AAV7A1 Upgunned Weapon Station. The weapon fires the M430 round which is a high-explosive, dual purpose (HEDP) round which can penetrate 2 1/2 inches of rolled homogeneus armor (RHA).

PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity	1,827	189	415	497	18	-	-

WHY IS IT IMPORTANT? The MK-19 was introduced to counter the growing numbers of infantry fighting vehicles with which potential enemies are equipping their forces. The addition of twelve MK-19s in each infantry battalion will increase its organic firepower, and will allow the antitank weapons to concentrate their fires on tanks.

PROGRAM STATUS: The MK-19 is a joint service acquisition which has participation by all services. IOC is scheduled for 3d quarter, FY-87.

DEVELOPER/MANUFACTURER: Maremount Corporation, Saco, Maine

DRAGON PRODUCT IMPROVEMENT PROGRAM (PIP)

DESCRIPTION: The M47 Dragon is a medium antiarmor weapon. It is a tube-launched, optically-tracked, wire-guided missile system which consists of a fiberglass launching tube, missile and tracker. The missile is contained within the launcher, and after each engagement the reusable tracker is removed from the launcher and the launcher is discarded.

PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity							
Phase 1	-	-	4,259	5,258	2,422	-	-
Phase 2	-	-	-	-	-	7,200	7,200

WHY IS IT IMPORTANT? The PIP of the current Dragon system is a two phased program that will provide a viable medium antiarmor weapon until the mid-1990s.

Phase I: This phase will retrofit our current inventory of missile warheads to enhance armor penetration by 80% over the current warhead's capability. This improvement is needed to defeat the current and postulated (1990s) armor threat.

Phase II: This phase provides for the procurement of an improved missile and tracker. The improved missile will be able to fly to 1,000 meters 5 seconds faster than the current missiles and will have a range of 1,500 meters vice the current 1,000 meters. The tracker will have a combination day/night capability and will not exceed 16 pounds in the ready-to-fire mode. The tracker will have an improved tracking capability to ensure a first round hit probability of at least 85 percent at the maximum range. It will have the ability to acquire and lock into a moving target at crossing speeds of 20 kilometers per hour at a range of 1,500 meters.

PROGRAM STATUS: The Marine Corps will procure the Dragon PIP as an interim replacement for the present Dragon while continuing to support the Army's development of the Advanced Antitank Weapon System-Medium (AAWS-M). Phase I will retrofit 11,939 missile warheads. For Phase II the Marine Corps may exercise three 1 year contract options in order to purchase 6,500 missiles and 700 missile trackers per year starting in FY-91.

DEVELOPER/MANUFACTURER: McDonnell Douglas

TOW-2A

DESCRIPTION: The TOW-2A missile is the latest missile in the TOW family. It provides an antitank weapon with increased lethality, improved probability of hit, reduced-visibility capability, and a significant improvement in a countermeasure environment. The TOW-2A missile contains a six-inch warhead, reloaded flight motor and a thermal beacon.

PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity	-	3,250	2,680	2,585	2,562	1,627	1,579

WHY IS IT IMPORTANT? The improved missile will permit Marine infantry units to defeat advanced Soviet armor and will enhance the infantry's antiarmor capability on the battlefield.

PROGRAM STATUS: Procurement of the TOW-2A will begin in FY-87. Other TOW improvements are continuing. The missile ordnance inhibit circuit safety modification kit procurement will be completed in FY-88. The TOW optical improvement modification will harden 1,350 day sights and 602 night sights. The hardening will protect the sights and the operator against hostile electro-optical counter measures.

DEVELOPER/MANUFACTURER: Hughes Aircraft

M9 BERETTA PISTOL

DESCRIPTION: A 9mm, lightweight, double action, automatic pistol.

PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity	10,000	22,181	22,182	13,589	6,978	-	-

WHY IS IT IMPORTANT? The weapon will replace the current .38 and .45 caliber pistol which are at the end of their service lives and are no longer logistically supportable. The weapon will provide increased range, lethality, safety and interoperability within NATO. The new pistol will provide improvements in readiness due to readily available parts and ammunition commonality.

PROGRAM STATUS: A 5 year contract was awarded on 10 April 1985.

DEVELOPER/MANUFACTURER: Beretta USA Corporation

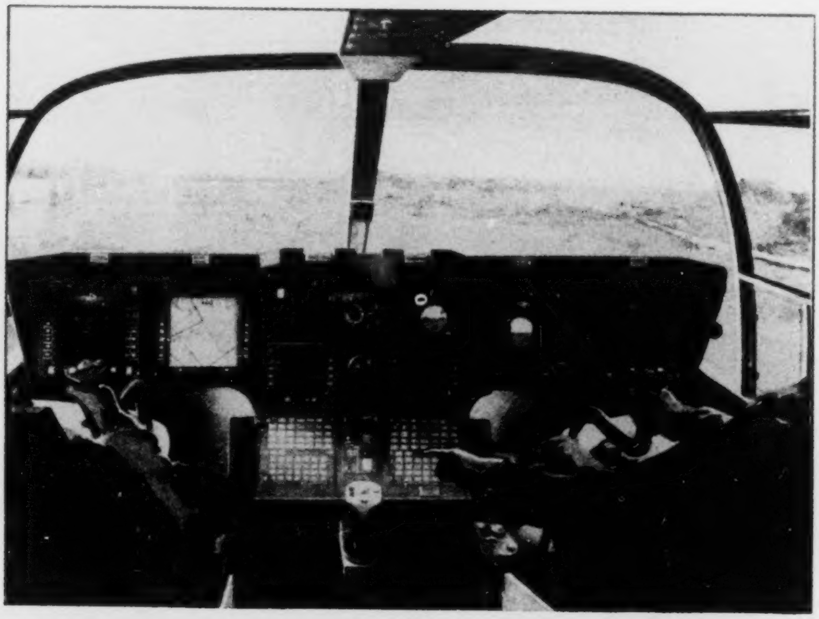
Part 2

Aviation Combat Element

Introduction

The ACE of a MAGTF is task organized to provide the required six functions of Marine aviation. These functions--air reconnaissance, antiair warfare, assault support, offensive air support, electronic warfare, and control of aircraft and missiles--are provided in varying degrees based on the tactical situation and the size of the MAGTF.

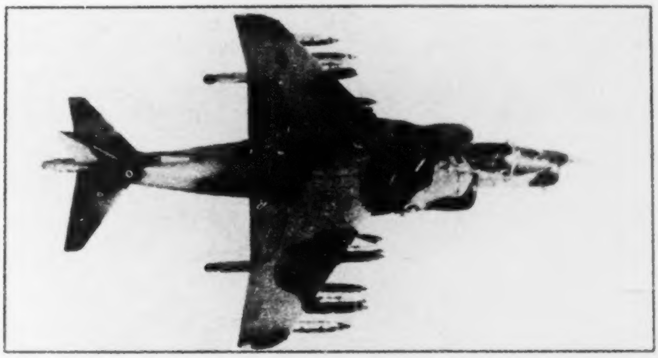
Normally, there is only one ACE in a MAGTF. It includes those aviation command (including air control agencies), combat, combat support, and combat service support units required by the situation. It varies in size from an aircraft squadron to an aircraft wing(s).



Proposed V-22A Flight Crew Station

This section is a compilation of program summary papers on the major Marine Corps aircraft and aviation weapon system programs. These papers address modernization and force level issues associated with tactical aircraft (fixed-wing), assault aircraft and assault support aircraft, as well as an array of antiarmor weaponry, air defense missiles, and command and control systems. Profiles for joint aircraft programs; i.e., the F/A-18, A-6F, EA-6B, V-22A, and CH/MH-53E reflect both the total DON planned procurement and the estimated USMC portion of the PresBud 88/89 program.

AV-8B "HARRIER"



DESCRIPTION: The AV-8B is a single seat, transonic, vectored-thrust, light-attack aircraft. The AV-8B is capable of increased payloads and extended range, and offers improved reliability and maintainability over the AV-8A. It is designed with a V/STOL capability to provide increased responsiveness to ground force close air support requirements through basing flexibility and high sortie rates. It will be configured with the Angle Rate Bombing System (ARBS) which provides an extremely accurate first pass attack capability and high kill probability through the use of passive laser spot or TV tracking.

PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity	138	42	32	32	15	15	15

WHY IS IT IMPORTANT? USMC tactical aviation is required to support amphibious and ground forces in a timely and effective manner. As part of tactical aviation, the missions of the light attack aircraft are close air support and interdiction. These missions are performed by the USMC either independently or as part of an expeditionary force, and require close air support aircraft with operational flexibility. The high degree of mobility inherent in ground combat operation results in rapid changes in the size and location of the battlefield. Consequently, demands for close air support operations frequently occur at considerable distances from established airfields and in terrain that is not suitable for construction of conventional support facilities. Thus, combat air support response times are greater than desired with conventional aircraft. V/STOL attack aircraft can respond to these combat requirements more rapidly because their flexibility enables them to be based closer to the battlefield.

PROGRAM STATUS: Transition to an all V/STOL light attack force of eight operational squadrons and one training squadron is approximately 50 percent complete.

DEVELOPER/MANUFACTURER: McDonnell Douglas

F/A-18 "HORNET"

DESCRIPTION: The F/A-18 is a twin-engine, single pilot, supersonic fighter and attack aircraft. The aircraft will fulfill both air-to-air and air-to-ground mission requirements. It has the capability to be both land and carrier based. The F/A-18 incorporates state of the art technology such as digital fly-by-wire flight controls, multimode radar and use of lightweight composites to enhance the combat capability and flexibility of the aircraft. A requirement to add increased night, marginal-weather and tactical reconnaissance capability is currently being developed.

PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity							
DON	494	84	84	72	72	72	72
USMC - estimate	120	27	56	37	70	49	14

WHY IS IT IMPORTANT? The Marine Corps' requirement for a fighter and attack aircraft has been filled by the F-4 Phantom. These aircraft are among the oldest in the DON. Additionally, the Phantom incorporates early 1960's technology which seriously hampers its combat effectiveness against current threat aircraft and air defense systems. The F/A-18 has the capability to accomplish the Marine Corps' fighter and attack mission and the adaptability to be effective for the next 20 years.

PROGRAM STATUS: The Marine Corps currently has six operational F/A-18 squadrons, each with 12 aircraft. In FMF employment, the F/A-18 has proven to be inordinately capable and effective.

DEVELOPER/MANUFACTURER: McDonnell Douglas

F/A-18 RECONNAISSANCE KIT

DESCRIPTION: The F/A-18 reconnaissance kit, when installed in the two-seat F/A-18D, will allow that aircraft to perform all-weather, real-time aerial reconnaissance in support of the MAGTF. The initial kit, which contains a side-looking radar, an infrared line scanner, a tape recorder and a datalink, will be continuously improved by adding longer-range sensors, and higher-capacity recorders and datalinks. The Hornet, with the kit installed, will still retain all its capabilities as superior fighter and attack aircraft except for the nose gun, which will be removed during reconnaissance missions to accommodate some of the specialized equipment.

PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity	-	-	-	-	-	-	12

WHY IS IT IMPORTANT? The Marine Corps' requirement for photo reconnaissance has been satisifed by RF-4B Phantoms. These aircraft are becoming more difficult and costly to support as F-4 fighters are phased out of the Marine Corps inventory. The F/A-18 meets the requirements for an easily supported, more survivable, state of the art platform to carry on the mission of aerial reconnaissance.

PROGRAM STATUS: A development program is well underway to add an all-weather, real-time reconnaissance capability to the two-seat F/A-18D. IOC is scheduled for FY-92.

DEVELOPER/MANUFACTURER: TBD

CH/MH-53E "SUPER STALLION"

DESCRIPTION: This 3-engine helicopter is designed to lift 16 tons over a 50 nautical mile (NM) combat radius. It has a 79-foot main rotor diameter, seven titanium spar main rotor blades, a 20-foot diameter tail rotor that is canted 20 degrees, and a main gear box qualified to 13,140 shaft horsepower. This shipboard-compatible helicopter is an assault support aircraft that can be employed for the internal lift and movement of cargo for the recovery of tactical aircraft and for the external lift of weapons and equipment.

PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity							
DON	107	14	14	14	4	-	-
USMC - estimate (CH-53E)	79	10	6	7	4	-	-

WHY IS IT IMPORTANT? This helicopter is the Marine Corps' heavy lift assault support helicopter and is an integral part of our present helicopter lift force. The CH-53E satisfies the requirement for the tactical movement of heavy weapons and equipment in the amphibious assault subsequent operations ashore, and provides lift for retrieval of downed aircraft and damaged equipment.

The Marine Corps has a mid-term requirement for a minimum of six squadrons of CH-53Es to meet the heavy lift demands of a force which will include the M-198 howitzer and its prime mover, division heavy equipment and the FLS. The existing programmed procurement of CH-53E aircraft supports four squadrons.

PROGRAM STATUS: The Marine Corps plans to continue aircraft procurement throughout the FYDP, which currently reflects a 106-aircraft DON program in support of both Marine Corps heavy lift requirements. Additional procurement will be required in FY 90-92 in order to meet Marine Corps heavy lift requirements.

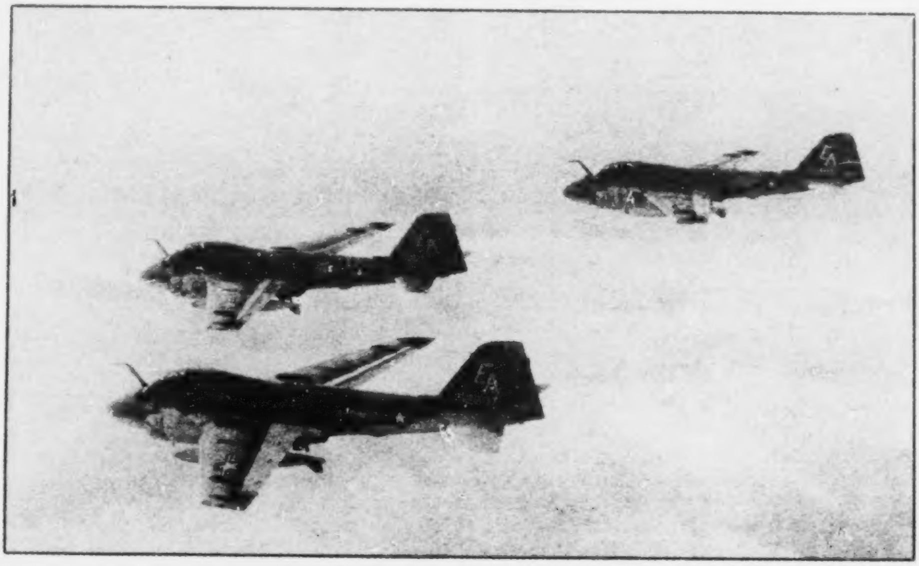
DEVELOPER/MANUFACTURER: Sikorsky Aircraft

A-6F "INTRUDER"

DESCRIPTION: The A-6F is a two-seat, twin-engine, subsonic attack aircraft capable of striking targets day or night in all weather conditions. This versatile aircraft carries a wide range of conventional and/or nuclear weapons for a variety of mission areas to include long-range interdiction, war-at-sea, strikes, mining and close air support. The aircraft has a sophisticated attack/navigation system to support all-weather, low-altitude, terrain following and terrain avoidance flight as well as a radar and forward looking infrared (FLIR) sensor to acquire and strike targets without visual acquisition by the aircrew. The A-6F is a significant upgrade to the A-6E and will improve fleet reliability, performance and survivability against the projected threat of the 1990s and beyond.

PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity							
DON	-	-	12	18	24	24	36
USMC - estimate	-	-	-	-	-	12	12

WHY IS IT IMPORTANT? The A-6F is an all-weather attack aircraft, and provides the MAGTF commander a capability to conduct close air support during periods of darkness and under adverse weather conditions.



PROGRAM STATUS: The Marine Corps will retain the earlier aircraft, the A-6E pictured above, into the 1990s. Two of five A-6E squadrons will transition to the A-6F in the early 1990s.

DEVELOPER/MANUFACTURER: Grumman Aerospace

EA-6B "PROWLER"

DESCRIPTION: The EA-6B is a four-place, twin-turbojet aircraft with a fully integrated, computer-controlled electronic warfare system. The aircraft is deployable from austere shore bases or aircraft carriers. The EA-6B's ALQ-99 Tactical Jamming System consists of on-board receivers and up to five externally mounted ECM pods, and in combination with the Tactical Electronic Reconnaissance Processing and Evaluation System (TERPES), is capable of providing electronic countermeasures and tactical intelligence support for MAGTF operations.

PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity							
DON	133	12	6	9	9	9	9
USMC - estimate	15	1	1	2	2	2	2

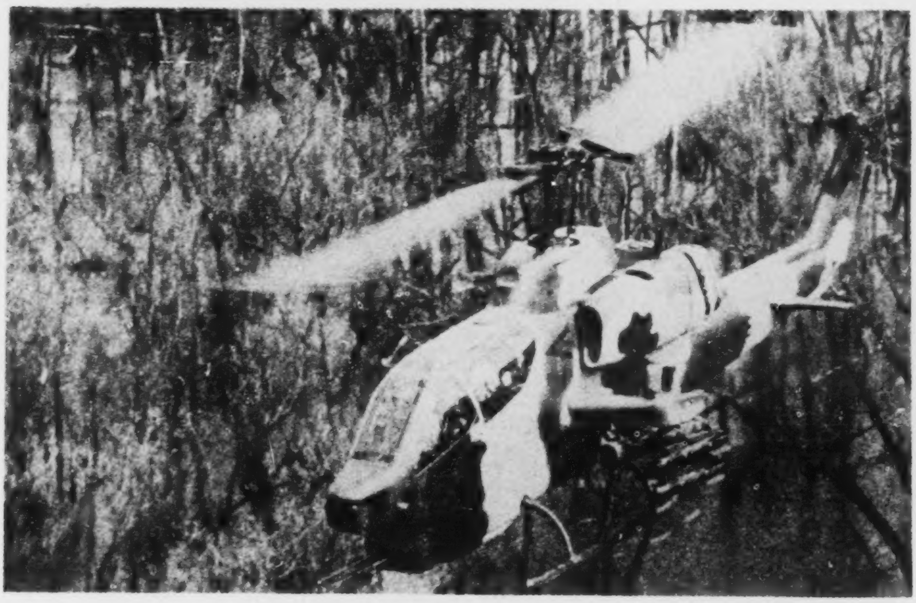
WHY IS IT IMPORTANT? The Marine Corps requires the EA-6B tactical electronic warfare (EW) aircraft to protect and screen USMC strike force and close air support aircraft. This aircraft denies the enemy effective use of early warning, ground control intercept, surveillance/acquisition and terminal threat (gun & surface-to-air missile) radars. In addition to tactical battlefield jamming support, the EA-6B provides the Marine Corps with a capability for near real-time intelligence input via TERPES to the MAGTF commander. The EA-6B is essential to aircraft survival on the modern electronically-dominated battlefield.

PROGRAM STATUS: Current force levels, while providing a meaningful warfighting capability, are insufficient to support overall MAGTF requirements. Additional procurements are required to combat the 1990s threat density and capabilities.

DEVELOPER/MANUFACTURER: Grumman Aerospace

AH-1W "SEA COBRA"

DESCRIPTION: The AH-1W, formerly called AH-1T+, is a two-place, tandem-seat, twin-engine attack helicopter capable of land or sea based operations. Its primary tasks are armed support for aerial or ground operations and point



destruction of enemy armor. Improvements to the Sea Cobra since initial procurement in 1978 permit it to fire a variety of weapons to include TOW, Hellfire, Sidewinder and Sidearm. The aircraft incorporates the GE T-700 engine, which results in a quantum improvement in high/hot operations and safety of flight. In addition to the AH-1W procurement shown below, 37 AH-1Ts are being converted to the more capable AH-1W.

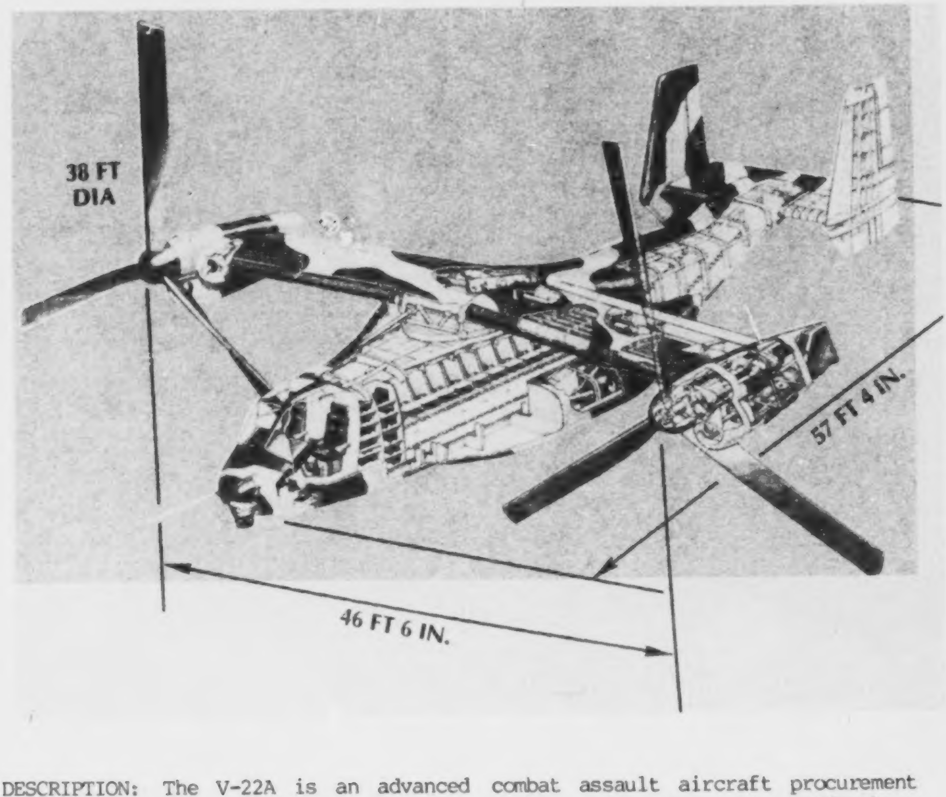
PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity	44	-	22	12	-	-	-

WHY IS IT IMPORTANT? The AH-1W is a Marine Corps attack helicopter and it fulfills the requirement to provide enroute protection for our assault helicopters and their embarked forces. Further mission requirements include close-in fire support for landed troops and point destruction of enemy armor. Due to the versatility of the Sea Cobra, the AH-1 community remains heavily commited.

PROGRAM STATUS: AH-1W procurement to date signify the initial step in the modernization of the Marine Corps' attack helicopter force. FY 88/89 procurement will enable the Marine Corps to meet existing inventory shortfalls.

DEVELOPER/MANUFACTURER: Bell Helicopter

V-22A "OSPREY"



DESCRIPTION: The V-22A is an advanced combat assault aircraft procurement program managed by the Navy for joint service application. The V-22A is a tilt-rotor aircraft combining the efficient flight characteristics of a modern turbo-prop aircraft with the vertical take off and landing capabilities of a conventional helicopter. The Osprey will cruise at 250 knots and with a ferry range of 2,100 nautical miles it will be capable of self-deploying worldwide without aerial refueling, enhancing its role for all services. The V-22A program provides an aircraft to meet the amphibious/vertical medium assault support needs of the Marine Corps; the combat search and rescue, special warfare and fleet logistics support needs of the Navy; the special operations needs of the Air Force; and the aeromedical evacuation, combat transport of troops and supplies, combat search and rescue, and special operations needs of the Army. The present total procurement quantity of 913 aircraft provides 552 for the Marine Corps, 50 for the Navy, 80 for the Air Force and 231 for the Army. The Navy is also studying procurement of an additional 300 aircraft for use in antisubmarine warfare.

PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity							
USMC - MV-22A					12	45	53
USN							8
USA							8
USAF (6 in FY-93)							
(DOD TOTAL)					12	45	69

WHY IS IT IMPORTANT? The existing inventory of medium assault helicopters is declining due to normal attrition. The inventory is costly to operate and maintain due to aging. To meet the OTH mission objectives for the 1990s and beyond, replacement aircraft with significantly increased capabilities (to include self-deployability) are required starting in 1991 to avert a critical shortfall in medium assault lift capability.

PROGRAM STATUS: The Osprey program has an acquisition strategy which is paced by the Marine Corps' urgent need for fleet deliveries during 1991. The program is a vital component of the modernization of Marine aviation. Of the 126 aircraft procured through FY-92, 110 are USMC configured.

DEVELOPER/MANUFACTURER: Bell Helicopter Textron and Boeing Vertol

F-21A "KFIR"

DESCRIPTION: The F-21A is a single-engine, single-pilot, supersonic Israeli fighter aircraft. The Navy has leased 12 F-21As and expects to lease an additional 13 for the Marine Corps during FY-87 to simulate Soviet fighters. The aircraft is limited to 710 knots below 25,000 feet and to 750 knots or Mach 2.2 above that altitude. The KFIR can out-accelerate most fighters to disengage.

PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity	1	13	-	-	-	-	-

WHY IS IT IMPORTANT? A Marine Corps Reserve adversary squadron equipped with 13 Kfir contractor-supported aircraft is required to provide air combat maneuvering (ACM) training. The mission of Marine Fighter Training Squadron-401 (VMFT-401) is to provide ground and air instruction in aerial combat tactics. VMFT-401 has an active duty commanding officer, eight reserve FTS pilots, 15 FTS enlisted, and 10 SMCR pilots. The squadron is located at MCAS Yuma, Arizona.

PROGRAM STATUS: VMFT-401 is scheduled to begin flight operations in early 1987.

DEVELOPER/MANUFACTURER: Israel Aircraft Industries

KC-130T

DESCRIPTION: The KC-130T is a multi-engine, land-based tanker aircraft which satisfies the Marine Corps tactical aerial refueling requirement for both fixed and helicopter aircraft. A more reliable and maintainable aircraft in comparison with its predecessors, the KC-130T is the newest model of the venerable KC-130 series and boasts state of the art avionics, as well as a pylon mounted fuel capacity of an additional 2,720 gallons of fuel. The impressive performance of the KC-130T in expeditionary and unimproved airfields underscores the importance of this aircraft to the support of Marine forces.

PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity	10	-	-	-	-	-	-

WHY IS IT IMPORTANT? In support of amphibious operations and subsequent operations ashore, tactical tankers provide an effective intra-theater force multiplier capability for fighter aircraft and extend the range and endurance of a variety of tactical aircraft in support of ground operations. This aerial refueling mission has been well served by the KC-130 series for decades. The incorporation of an aerial refueling capability in the current CH-53E and the future MV-22A place increasing demands on existing aerial refueling capabilities. The modernization of the Marine Corps Reserve aerial refueling forces serves to ensure the capability and quantity remain sufficient to meet its tactical refueling requirements while maintaining aircraft standardization in the force.

PROGRAM STATUS: The reserve KC-130T force modernization continues to be supported annually in Congress.

DEVELOPER/MANUFACTURER: Lockheed Aircraft Corporation

LASER MAVERICK AGM-65E

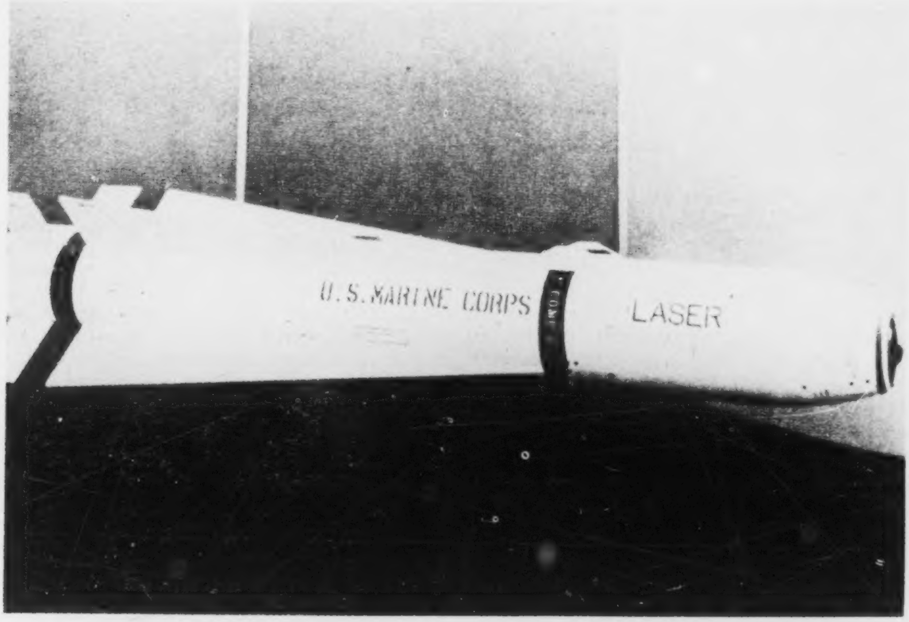
DESCRIPTION: Laser Maverick is a short-range, laser-guided, air-to-surface missile for close air support. Laser Maverick consists of a semi-active laser seeker, a 300-pound penetrating blast/fragmentation warhead with cockpit selectable fuze, and a rocket motor with an out-of-line ignition device to satisfy shipboard safety requirements. The warhead, fuze, rocket motor and launcher are common to the Navy's infrared (IR) attack weapons.

PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity	2,375	1,500	1,291	-	-	-	-

WHY IS IT IMPORTANT? Laser Maverick is the only weapon under development that satisfies the long-standing Marine requirement for a standoff guided missile for use by aircraft in close air support. The large (300 pound) warhead and terminal laser guidance give the ground commander the ability to positively identify and destroy a broad spectrum of targets, ranging from heavy armor to fortified bunkers. It can be loaded on the A-4M, AV-8B, F/A-18, and A-6E/F aircraft.

PROGRAM STATUS: A full production decision is expected in early 1987 and, if positive, fleet introduction will follow shortly thereafter.

DEVELOPER/MANUFACTURER: Hughes (primary)
Rockwell (laser seeker)



HELLFIRE

DESCRIPTION: Hellfire is the primary antitank weapon for the Army's AH-64. The 100 pound missile will have a semiactive laser terminal homing seeker. Presently entering production with the Army, the Marine Corps will adapt the missile for use on the AH-1J and AH-1W Sea Cobra attack helicopters.

PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity	1,961	-	1,393	1,410	1,769	2,410	2,992

WHY IS IT IMPORTANT? The employment of Hellfire is essential to the survivability of the Marine Corps' AH-1 helicopter on the nonpermissive threat battlefield. Hellfire provides an increased standoff capability combined with a considerably improved kill potential over present antitank guided missiles. Hellfire's range of greater than 5,000 meters significantly exceeds TOW's maximum range of 3,750 meters. With the indirect fire and lock on after launch firing modes, Hellfire does not expose the launch aircraft to the enemy during the missile launch and guidance sequence as TOW presently does. Finally, Hellfire's armor penetration/kill potential is greater than that of TOW.

PROGRAM STATUS: The Hellfire missile program recently completed Milestone IIIB and initial deliveries of production missiles have been made to the FMF.

DEVELOPER/MANUFACTURER: Rockwell International/Martin Marietta

SIDEARM

DESCRIPTION: Sidearm is a short-range, self-protection, antiradiation weapon designed for use by TACAIR and armed helicopters to counter short-range air defense systems. The weapon is designed to acquire and track mobile battlefield type threat systems. The Sidearm program is a Navy development to modify AIM-9C semi-active radar Sidewinder seekers to detect and home on radar emitters. The concept involves using on-board aircraft defensive electronic counter measures (DECM) equipment to provide threat detection and existing Sidewinder circuitry to provide missile lock-on/launch signals for the pilot. The missile hardware includes the modified seekers plus new AIM-9 missile components.

PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity	200	256	276	269	-	-	-

WHY IS IT IMPORTANT? The Marine Corps has an approved requirement for a quick reaction, short-range, antiradiation weapon which is compatible with Sidewinder-configured aircraft using on-board DECM equipment for threat detection. The mobile, short-range air defense systems represent a significant threat to TACAIR and attack helicopters on the modern battlefield. The SIDEARM, as a complement to the more sophisticated HARM weapon, will provide non-HARM equipped aircraft (AH-1, AV-8B and OV-10) with a point and shoot capability to suppress the close-in tactical threat.

PROGRAM STATUS: The Sidearm missile has recently completed initial operational testing (OT). Completion of the next phase of OT and fleet introduction is expected in late 1987.

DEVELOPER/MANUFACTURER: Motorola

HAWK

DESCRIPTION: Designed for particular effectiveness at low altitudes, Marine Corps' Hawk missile systems provide vital area defense against enemy air attack. The Hawk missile, which strikes at supersonic speed, is deadly against a full spectrum of hostile aircraft at all tactical speeds and altitudes. The system is mobile, helicopter-transportable, and designed to operate in an electronic countermeasures environment.

PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity (Missiles)	2,960	430	525	526	533	534	-

WHY IS IT IMPORTANT? Hawk is the Marine Corps' most lethal ground-launched, surface-to-air missile system. It is the organic weapon of the light anti-aircraft missile (LAAM) battalion which is organized to provide ground-based air defense for the MAGTF.

PROGRAM STATUS: The Marine Corps has programmed sufficient Hawk equipment to field a LAAM battalion in each MAF (three firing batteries with four firing sections each). The Marine Corps supports procurement of sufficient numbers of Hawk missiles to ensure 60 days of supply.

DEVELOPER/MANUFACTURER: Raytheon Corporation

STINGER

DESCRIPTION: Stinger is a man-portable, visually-aimed, shoulder-fired, surface-to-air defensive weapon system designed to counter the low altitude air threat. The weapon can engage jet and helicopter aircraft from all aspects, including head-on, to provide a true point defense capability. Stinger employs a passive infrared homing missile with an advanced guidance system which assures precision intercepts forward of the jet plume of high-speed aircraft. The Stinger system is designed to meet the air threat of the 1990s. It also incorporates an identification friend or foe (IFF) interrogator and advanced infrared countermeasures circuitry.

PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity	4,741	1,385	3,067	3,115	1,853	1,793	-

WHY IS IT IMPORTANT? The man-portable Stinger weapon system is the first ground launched air defense capability ashore in the assault echelon of an amphibious operation. It is the organic weapon of the low altitude air defense (LAAD) battalion which is organized to deploy Stinger teams to provide close-in, low-altitude air defense for each element of the MAGTF.

PROGRAM STATUS: Air defense of the MAGTF, in particular the maneuvering combat elements, relies heavily on Stinger and its ability to destroy low altitude, fixed-wing aircraft and helicopters. The Marine Corps' goal is procurement of sufficient Stinger missiles to ensure 60 days of supply.

DEVELOPER/MANUFACTURER: General Dynamics

LIGHTWEIGHT EARLY WARNING DETECTION DEVICE (LEWDD)

DESCRIPTION: The Marine Corps requires a lightweight, man-portable, surveillance and detection device to alert and cue Stinger gunners to the approach of hostile aircraft. The Marine Corps will seek a non-developmental item such as one of many lightweight radars commercially available which are simple and robust with the following capabilities:

- All-weather 20 kilometer coverage
- Man-portable subassemblies with a total combined weight of 200 pounds or less
- Vehicle or battery powered
- Setup time of five minutes or less

PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity	-	-	-	12	36	20	-

WHY IS IT IMPORTANT? Stinger, while highly effective, is limited by the visual acuity of the gunner. LEWDD will correct this grave deficiency by allowing the detection of hostile aircraft beyond the eyesight of the Stinger gunner, thereby exploiting the inherent effectiveness of the Stinger missile itself.

PROGRAM STATUS: Demonstration of candidate systems is scheduled for the 2d quarter, 1987. The first system will be operational in 1990.

DEVELOPER/MANUFACTURER: TBD

MISSILE DETECTION SYSTEM, AN/AAR-47

DESCRIPTION: The AN/AAR-47 equipment detects incoming missiles and provides an automatic signal for ejection of expendable countermeasures, thereby protecting the aircraft. Aircrew are also provided indications of threat direction via existing aircraft warning displays.

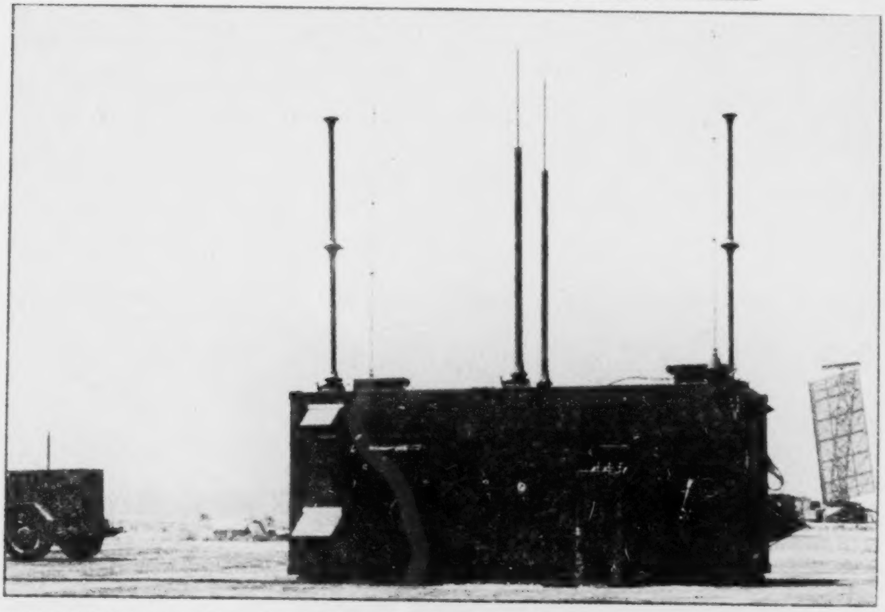
PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity	-	-	164	162	150	42	-

WHY IS IT IMPORTANT? The AN/AAR-47 provides the helicopter the necessary protection to operate in a hostile environment now populated by a wide variety of diverse infrared surface to air missiles.

PROGRAM STATUS: Sufficient AN/AAR-47 systems have been programmed to meet USMC helicopter requirements. The applicability of the AN/AAR-47 for high performance fixed-wing aircraft is presently under evaluation.

DEVELOPER/MANUFACTURER: Honeywell

TACTICAL AIR OPERATIONS MODULE (TAOM), AN/TYQ-23 V(I)



DESCRIPTION: The TAOM is a joint Marine Corps/Air Force program designed to develop and produce operations modules which, when employed independently or in groups of up to five, provide for air defense and air traffic control and coordination as required by the MAGTF during combat operations.

PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity	2	5	9	8	13	10	4

WHY IS IT IMPORTANT? The TAOM program will replace aging equipment which is logistically unsupportable. The equipment developed is modular. This design allows for the phased introduction of capability into an operating area, and a rapid increase in capability with the addition of identical modules. The TAOM program is essential to the USMC deployment concept. TAOM requires fewer technical personnel to operate than the current system. It also offers training improvements at a reasonable cost and a reduction in the strategic lift requirement. Availability is increased due to improved system reliability and ease of repair. The modules will have the operational capabilities to perform the required functions on the modern battlefield. The procurement profile will provide modules required to equip each Marine air control squadron with four modules to support training.

PROGRAM STATUS: The Marine Corps requested the TAOM in the FY-86 budget. Milestone IIIA was passed in December 1986. An IOC of FY-91 is planned.

DEVELOPER/MANUFACTURER: Litton Corporation

AVIATOR'S NIGHT VISION IMAGING SYSTEM (ANVIS), AN/AVS-6

DESCRIPTION: ANVIS provides a third-generation image intensifier designed specifically for aviators. The system provides lightweight design, "look-around" peripheral vision, easy installation, and it enhances safe aircraft operation during night operations under clear, starlight conditions.

PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity	1,710	539	585	699	-	-	-

WHY IS IT IMPORTANT? ANVIS is the first night vision system designed specifically for providing helicopter aviation the capability to fly low with the ability to see and avoid obstacles. This provides a significantly increased capability for night operations in a hostile environment without the necessity for external light sources.

PROGRAM STATUS: Fleet introduction began in 1986. Full fleet capability is expected by 1990.

DEVELOPER/MANUFACTURER: Varian/ITT/VARO/Hughes

ADVANCED TACTICAL AIR COMMAND CENTRAL (ATACC)

DESCRIPTION: ATACC replaces the current TACC equipment with highly mobile shelters containing non-developmental operator consoles, large screen electronic displays, communications terminals, and automated planner work stations.

PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity	-	-	-	1	-	3	3

WHY IS IT IMPORTANT? The Tactical Air Command Center is the senior C^2 facility responsible for overall command and control of all air support and air defense operations within the MAGTF. It is the tactical air commander's command post and will replace obsolete, immobile, unsupportable equipment which no longer supports the MAGTF employment concept.

PROGRAM STATUS: The system has completed Milestones I and II. FSD will begin in FY-87.

DEVELOPER/MANUFACTURER: TBD

IMPROVED DIRECT AIR SUPPORT CENTRAL (IDASC)

DESCRIPTION: The IDASC is a low-risk, streamlined acquisition program which integrates non-developmental equipment such as shelters, communications terminals, status/display boards and crew work stations into a self-contained, highly mobile tactical C^2 facility.

PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity	-	5	5	-	-	-	-

WHY IS IT IMPORTANT? The Direct Air Support Center is the C^2 facility responsible for the conduct of tactical air support control of assault support and close air support operations. Its primary mission is the coordination of these aircraft with other supporting arms. The IDASC will replace equipment which is antiquated, unsupportable, and a maintenance burden.

PROGRAM STATUS: System is in FSD with a production decision expected in early 1987.

DEVELOPER/MANUFACTURER: SCI Technologies

JOINT TACTICAL INFORMATION DISTRIBUTION SYSTEM (JTIDS)

DESCRIPTION: JTIDS will provide users with secure, jam-resistant, voice and data communications capabilities. When integrated into a host tactical data system, JTIDS will support high-capacity, near-real-time exchange of tactical information and inherent relative navigation, position location, and identification capabilities. The Air Force is developing terminals based on the basic JTIDS technology, Time Division Multiple Access (TDMA). Associated with the implementation and employment of JTIDS is the parallel development of Tactical Digital Information Link-J (TADIL-J), a message standard being developed by the Joint Interoperability Tactical Command and Control System (JINTACCS) program.

PROCUREMENT PROFILE: TBD

WHY IS IT IMPORTANT? Current data communications capabilities supporting tactical command and control information exchange are vulnerable to exploitation and interception and are severely degraded when employed in a jamming environment. JTIDS and TADIL-J will overcome these deficiencies and provide tactical decision makers with survivable, secure, high capacity communications capabilities in support of internal, joint and combined command and control information exchange requirements. If the JTIDS program is not supported, the joint interoperability capabilities of the Marine Corps and a significant internal data distribution capability will continue to rely on outdated and highly vulnerable systems.

PROGRAM STATUS: The Marine Corps fully supports the expeditious achievement of a joint TADIL-J interface capability. The Marine Corps JTIDS/TADIL-J program is designed as a comprehensive effort to provide tactical commanders across the battlefield with jam-resistant, high capacity, voice and data communications. While the primary emphasis necessarily focuses on the TAOM implementation effort, follow-on platform implementations and Marine Corps-unique development efforts cannot arbitrarily be deferred without degrading the total capabilities of the integrated Marine Corps command and control system.

DEVELOPER/MANUFACTURER: TDMA: Singer-Kearfott
DTDMA: Hughes Aircraft Corporation

Part 3

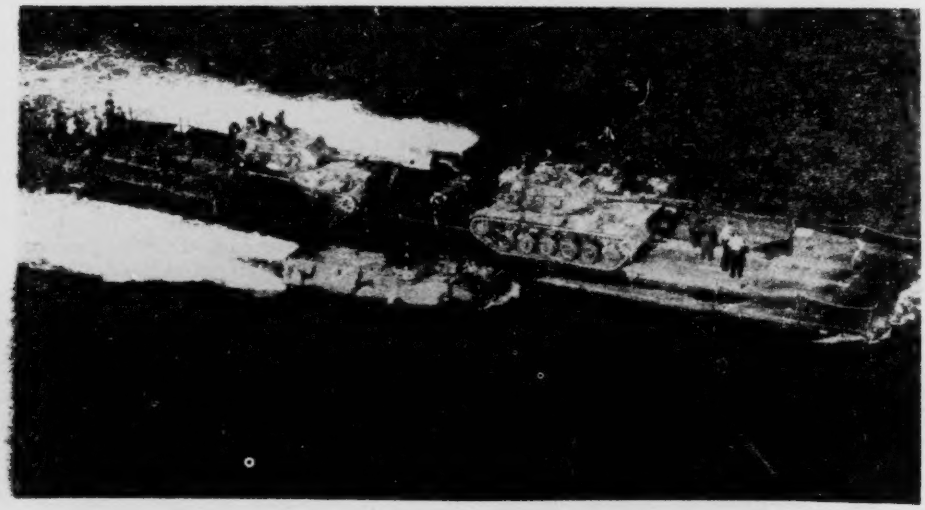
Combat Service Support Element

Introduction

The CSSE is a task organization tailored to provide that combat service support to the MAGTF which is beyond the organic capability of the GCE and ACE. Depending on the assigned mission, it is task-organized to provide any or all of the following functions: supply, maintenance, engineer, medical/dental, automated data processing, materiel handling equipment, personal services, food services, transportation, military police, disbursing and financial management. It is capable, to a limited extent, of providing smaller task organizations such as maintenance/supply contact teams for support of MAGTF operations as required.

The most comprehensive of the programs is the FLS. The Marine Corps FLS is an integrated program which provides intensive life cycle management of selected combat service support equipment to assure success in amphibious operations, while exploiting the benefits of containerization. The system is designed around international dimensional standards in order to be able to use all modes of transportation, especially the container-capable merchant fleet. Major subsystems of FLS are general supply, motor transport, engineer and service support equipment. The goals of the system are to reduce manpower; to lower equipment acquisition, logistics support costs and shipping space requirements; and to decrease training needs while enhancing the effectiveness of the logistics support system and the readiness posture of Marine Corps amphibious forces.

In addition to FLS, the Marine Corps has other programs designed to improve the Marine Corps' capability to provide logistics support to the MAGTF commanders. A discussion of the most important of these programs follows.



Ground Ammunition Program

The Marine Corps' FY-88 ground ammunition budget request totals $410.9 million. The FY-88 program is broken down by ammunition category as follows:

Item	Funding Request ($ Millions)	
	FY-88	FY-89
155 mm Artillery	68.7	56.2
Tank (M1)	36.8	64.8
Mortar	122.8	76.0
Small Arms	32.7	23.9
Other/ 1/	149.9	182.7
Total	$410.9	$403.6

1/ Includes pyrotechnics, grenades, training-unique ammunition, etc.

In keeping with DOD guidance, the Marine Corps program stresses readiness and sustainability. The current program allows for a significant increase in our inventory as well as adequate levels of training ammunition to allow sufficient practice rounds to maintain readiness.

The M1A1 tank line consists of 120mm ammunition. The 120mm ammunition system consists of kinetic energy (KE) M829 APFSDS-T and high explosive antitank (HEAT) M830 HEAT-MP-T rounds. The high specific energy on target enables the KE round to penetrate even the most resistive armor targets. The warhead has an additional defeat capability against lightly armored or soft targets. Each of the two rounds has its own target practice rounds, TP-T M831 and TPCSDS-T M865.

The mortar line consists of the 60mm illum and smoke WP rounds for the M224 LWCMS. This will complete the family of rounds for the M224 mortar system.

The highlights of the artillery ammunition request are shown below:

Artillery Ammunition

Item	Quantity		$ Millions	
	FY-88	FY-89	FY-88	FY-89
155mm chg prop WB	187,631	181,698	13.0	13.0
155mm ADAM-long	435	1,147	2.0	5.4
155mm ADAM-short	435	1,355	2.0	6.4
155mm RAAM-long	10,633	4,355	14.7	6.2
155mm RAAM-short	25,338	9,945	35.0	14.2
155mm HEDP (ICM)	4,517	10,991	2.0	5.1
155mm chg prop RB	-	13,218	-	5.9
Total			68.7	56.2

Much of the currently programmed ammunition procurement is tied to the acquisition and fielding of new weapon systems. This fact is demonstrated below:

Item	New System	Quantity		$ Millions	
		FY-88	FY-89	FY-88	FY-89
60mm Illum	LWCMS	24,413	66,247	4.0	10.7
60mm SMK WP	LWCMS	38,607	28,949	4.1	3.1
120mm TP-T	M1A1 tank	4,589	18,588	4.3	16.9
120mm TPCSDS-T	M1A1 tank	4,040	16,627	2.5	10.0
120mm APFSDS-T	M1A1 tank	6,890	13,405	7.8	14.8
120mm HEAT-MP-T	M1A1 tank	17,231	30,199	30.0	50.0
RKT 83mm HEAA	SMAW	4,089	8,124	2.3	23.6
RKT 83mm HEAA (Practice)	SMAW	682	1,420	1.1	2.3
RKT 84mm AT-4		16,212	17,728	13.0	12.3
Total				$69.1	$143.7

Viewed as an essential element of a balanced program, the FY 88/89 ground ammunition request complements the overall Marine Corps program and ensures operational readiness. The FY-88 budget request will procure an additional 12.4 days of ammunition, the FY-89 extends this an additional 4.6 days which meets Marine Corps unit of measure for sustainability in this area. The FY-88 request will increase our present inventory to approximately 58 days of ammunition, while the FY-89 dollars raise the inventory to 62.6 days of ammunition. In FY-88 the Marine Corps begins the procurement of mobilization ammunition to support the rapid expansion of the Corps if necessary.

REVERSE OSMOSIS WATER PURIFICATION UNIT (ROWPU)--ENHANCED

DESCRIPTION: The enhanced ROWPU is a self-contained unit, ISO-configured in an 8' X 8' X 10' shipping frame. These are the same transport dimensions as the present 600 gallons per hour (gph) ROWPU.

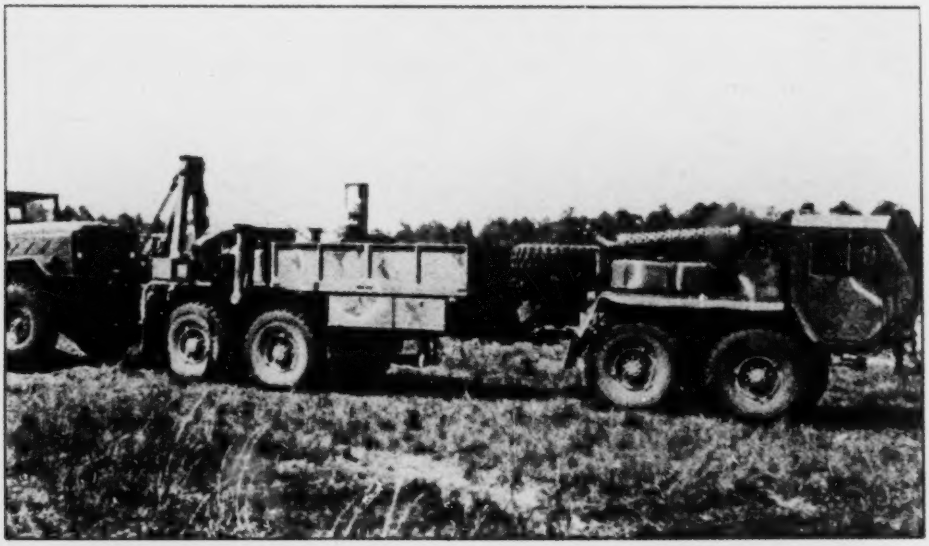
PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity	-	-	-	-	-	-	50

WHY IS IT IMPORTANT? The enhanced ROWPU is designed to produce potable water for the FMF from salt, brackish, and fresh water sources at the following rates: 1,200 gph from salt water; 1,800 gph from brackish water; and 3,600 gph from a freshwater source. The enhanced ROWPU will replace the current 600 gph unit on a one-for-two basis, substantially reducing quantities, cube and square.

PROGRAM STATUS: The FSED contracts for prototypes from two manufacturers are to be awarded in the 1st quarter FY-88. Hardware deliveries will follow a year later. The developmental and operational testing (DT/OT II) will be complete in time for a Milestone III decision in the 2d quarter FY-90.

MANUFACTURER: TBD

LOGISTICS VEHICLE SYSTEM (LVS)



DESCRIPTION: The LVS consists of a front diesel-powered unit and four interchangeable rear units. It has eight-wheel drive and an automatic transmission. It is articulated, has a 60-inch fording capability without fording kit, weighs 26,000 pounds and has 85 percent commonality with the Army's Heavy Expanded Mobility Tactical Truck (HEMTT).

PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity	1,029	1,113	359	-	-	-	-

WHY IS IT IMPORTANT? The LVS is a family of combat support vehicles designed to replace overage, oversize, diverse and T/E deficient items with a tractor and four interchangeable rear body units (container and cargo trailers, recovery trailer unit and fifth wheel). LVS is air-transportable and its dimensional standardization permits container ship transport. LVS' design features provide enhanced cross-country mobility required to move weapon systems and logistics support for operating forces.

PROGRAM STATUS: Initial fielding occurred in August 1985. IOC was achieved in September 1986. Currently an R&D effort by industry is ongoing to provide a self-loading/unloading version of the container hauler variant (MK14) of the LVS.

DEVELOPER/MANUFACTURER: Oshkosh Truck Corporation

CONTAINER HANDLER, ALL PURPOSE (CHAP)

DESCRIPTION: The CHAP is a lightweight materiel handling equipment capable of handling International Organization for Standardization (ISO) compatible containers and shelters up to 8' X 9' X 40' in landing craft, amphibious shipping and RO/RO vessels. It will be capable of transporting 68,000 pound containers at the surf line, over the beach and on improved roads, at speeds of 15 mph loaded and 30 mph unloaded. It will stack containers two high and will be capable of operation by a single operator.

PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity	-	-	-	-	-	50	100

WHY IS IT IMPORTANT? The increasing logistical demands of the highly maneuverable, increasingly mechanized MAGTF are being met by the containerization of ammunition, food and general supplies. Sustainment of the MAGTF ashore is critically dependent on throughput of containerized cargo. Current capability is marginally adequate, but manpower intensive and relatively slow. Current technology will permit the development of a one-man operated, self-propelled, all-terrain machine capable of replacing both the Rough Terrain Container Handler (RTCH) and the Lightweight Amphibious Container Handler (LACH).

PROGRAM STATUS: The CHAP is in the exploratory development phase and will transition to demonstration/validation in FY-88. Initial procurement is scheduled for FY-91.

DEVELOPER/MANUFACTURER: TBD

TRAILER LAUNCHED BRIDGE (TLB)

DESCRIPTION: The Trailer Launched Bridge (TLB) is a military load class (MLC) 70 bridge, capable of spanning gaps up to 22 meters wide. It is a hydraulically powered, double-folded scissors-type bridge, carried and deployed by a trailer/launcher and usable in either combat or CSS roles.

PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity	-	-	-	-	25	-	-

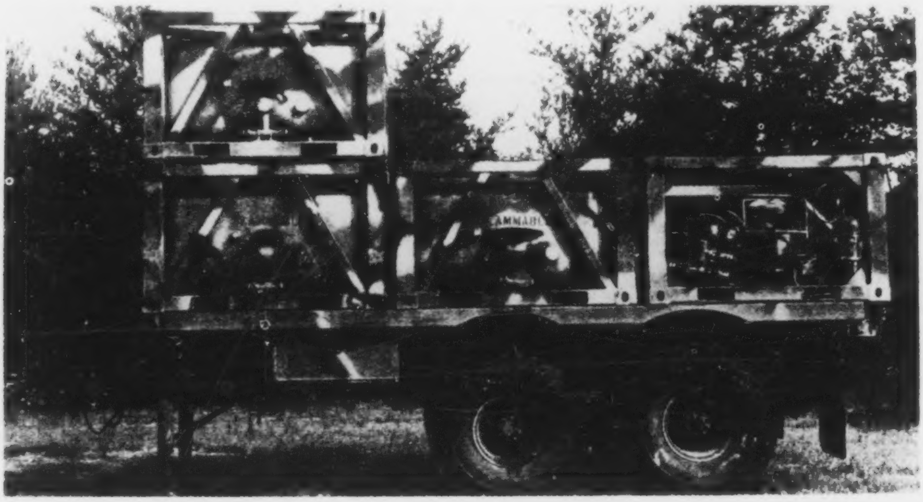
WHY IS IT IMPORTANT? Current USMC bridging is CSS-oriented. With the advent of the Armored Vehicle Launched Bridge (AVLB), the leading edge of the GCE will have dedicated, rapidly employable assault bridging for the first time. The hand-erected Medium Girder Bridge (MGB) cannot fully support MAGTF maneuverability requirements. The TLB will complement both the MGB and the AVLB and will provide in-depth bridging capability throughout the objective area.

PROGRAM STATUS: The TLB is in full scale development with DT II scheduled to start in the 1st quarter FY-87.

MANUFACTURER: TBD

FUEL/WATER STORAGE AND PUMP MODULES (SIXCONs)

DESCRIPTION: SIXCONs provide the capability to store and transport up to 900 gallons of liquid in a single module. The SIXCON pump module provides the capability to pump fuel or water from SIXCON storage modules at a rate of 125 gallons per minute. Each module has forklift tineways on all sides and can be helolifted or transported on trucks or containerships. With the advent



of these modules comes a greatly increased capability and flexibility. Both fuel and water can be transported to forward elements of a MAGTF in variable quantities by the most effective means available on land or by air.

PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity		F W	F W	F W	F W		
FUEL/WATER STORAGE	536/625	196/325	507/188	370/ -	300/ -	-	-
FUEL/WATER PUMP	252/402	100/ -	201/ -	-	-	-	-

WHY IS IT IMPORTANT? The SIXCON modules were designed and are expected to fill the void left by the reduction in specialized tankers (M49/M50). The SIXCONs can be used individually or in combination of up to six modules (5 storage and 1 pump). They can be connected so that six modules form an 8' X 8' X 20' container.

PROGRAM STATUS: The first contract award was in 1985. Water storage modules are loaded on MPS. The first fielding is expected in July 1987, once provisioning is complete.

DEVELOPER/MANUFACTURER: Isometrics, Peabody-Barnes

HIGH MOBILITY MULTIPURPOSE WHEELED VEHICLE (HMMWV)

DESCRIPTION: The HMMWV is a multipurpose 5/4-ton high mobility vehicle that is equipped with 4-wheel drive. There are six HMMWV variants: the TOW carrier, augment carrier, cargo/troop carrier, two-litter ambulance, four-litter ambulance and the shelter carrier. It has a common chassis, a diesel engine, and automatic transmission.

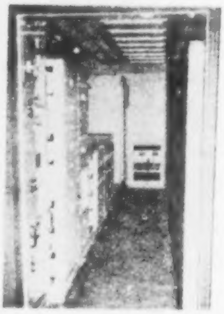
PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity	15,339	743	136	-	-	280	192

WHY IS IT IMPORTANT? The HMMWV is the primary tactical vehicle for combat and combat support units. Its primary functions are troop and weapon transport support, weapons platform, reconnaissance, fire support, medical evacuation, and command, control and communication applications. This vehicle will have a 5/4-ton capacity and will replace all current 1/4-, 1/2-, 3/4-, and 5/4-ton trucks and 1/4-ton trailers. The common engine chassis and automatic transmission will reduce the logistic burden and standardize operational/maintenance requirements.

PROGRAM STATUS: IOC was attained in July 1986. The replacement program for the initial vehicles will begin in FY-91 using an Army contract.

DEVELOPER/MANUFACTURER: AM General

ELECTRONIC MAINTENANCE COMPLEX (EMC)



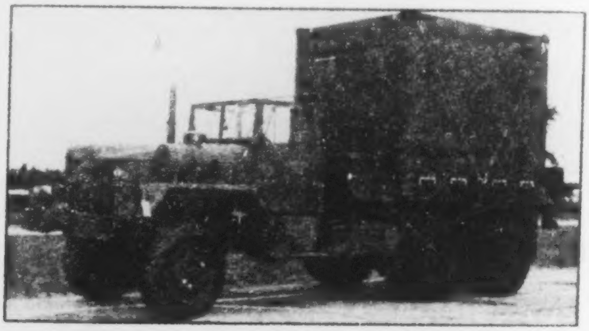
DESCRIPTION: The EMC is comprised of an ISO shelter and easily relocatable internal furnishings and appointments (work benches, desks, storage racks, etc.) and service and utility items (electrical power entry panel, control and distribution; lighting; etc.). A single shelter provides an electronics maintenance facility. Shelters may be joined together to meet mission requirements. A single maintenance complex may include four shelters.

PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity	45	16	-	14	8	7	14

WHY IS IT IMPORTANT? To successfully counter predicted threats, the Marine Corps must be capable of rapid response, organized and tailored to general or specific mission needs. The success of combat operations at any level of intensity is directly dependent upon the degree of efficiency and effectiveness of the operational logistic support provided. The ability to communicate, maneuver and coordinate/direct fire can only be assured if the sophisticated weapons and equipment employed by the FMF receive timely and efficient maintenance support. A major consideration in this area is the availability of adequate facilities for maintenance of electronic systems and components. Facilities are required which provide working space, internal appointments, environmental conditioning, and protection for the complete range of activities required for electronic maintenance. The mounted EMC is depicted in the bottom picture.

PROGRAM STATUS: IOC for EMC is scheduled for FY-89. The Marine Corps projects a total of 1,050 EMC suites.

MANUFACTURER/DEVELOPER: Gichner Mobile Systems/Marine Corps
Brunswick Systems/Marine Corps



MARINE CORPS AUTOMATED TEST EQUIPMENT SYSTEM (MCATES)

DESCRIPTION: MCATES incorporates the necessary equipment, computer programs and associated documentation to enable automatic/semiautomatic testing and fault diagnosis of electronic assemblies and subassemblies. In addition, MCATES provides for Test Program Sets (TPSs) development, verification/validation testing, revision/update and management procedures. MCATES is comprised of two functional groups. The first group consists of the test head, instrument controller and associated General Purpose Electronic Test Equipment (GPETE), located at all intermediate level maintenance activities. The second group is the Test Program Set Development System (TPSDS), located at the Depot Maintenance Activity, MCLB, Albany, Georgia. The key elements in the second group are a central host computer, digital test program generator, TPS programming stations, documentation stations, configuration management stations, and verification/validation stations.

PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity	24	34	-	113	25	-	-

WHY IS IT IMPORTANT? To successfully counter predicted threats, the Marine Corps must be capable of rapid response, organized and tailored to general or specific mission needs. The ability to communicate, maneuver, coordinate and direct fire on the enemy can only be assured if the sophisticated weapons and equipment employed by the FMF receive timely and efficient maintenance support.

PROGRAM STATUS: A contract was awarded in August 1986 for the manufacture of programmable test sets. The Marine Corps will field the Analog Printed Test Set (APTS) in March 1987. IOC for MCATES hybrid test station is scheduled for FY-88.

MANUFACTURER/DEVELOPER: Various/Marine Corps

CHAPTER IV

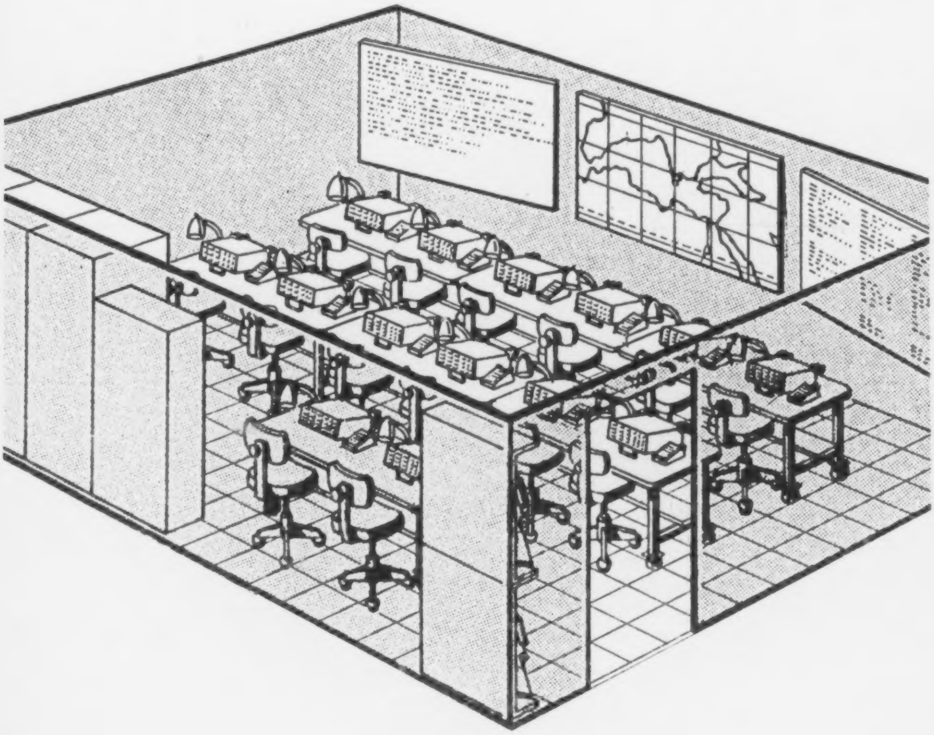
C^4 AND INTELLIGENCE

Part 1

Command, Control, Communications and Computer (C^4) Systems

Introduction

This section outlines command, control, communications and computer (C^4) systems intended to enhance the Marine Corps' capability to perform its assigned missions. The Marine Air-Ground Task Force (MAGTF) has a unique C^4 capability. MAGTFs are organized, equipped and trained under the concept of unity of command, providing the commander complete control over all elements of the MAGTF. The MAGTF is equipped with the capability to provide austere external communications links with the Naval Telecommunications System (NTS), Defense Communications System (DCS) and with adjacent U.S. or allied units.



POSITION LOCATION REPORTING SYSTEM (PLRS)

Man-Pack Basic Unit

DESCRIPTION: PLRS is a joint USA-USMC Program. A PLRS system network consists of a master station housed in a mobile shelter, a duplicate alternate master station and up to 370 basic user units, which may be man-, vehicle-, or aircraft-transportable. The master station consists of standard military computers and a tactical display. The handheld user readout device displays position and navigation information or limited free text messages. PLRS is crypto secure and jam resistant and will significantly enhance commanders' versatility in tactical operations by providing accurate (15 meter circular error probable (CEP) for ground users, 100 meter CEP for air) position location of friendly units. Small units, vehicles and aircraft will be able to rapidly determine their positions, as well as those of other PLRS-equipped units during periods of reduced visibility and in featureless terrain. The master station automatically y reports position location information throughout the PLRS network.

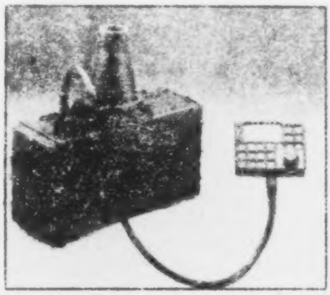
PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity (Systems)	6	-	-	2	4	-	-

WHY IS IT IMPORTANT? With the capabilities provided by PLRS, commanders at all levels will be afforded improved maneuver capabilities for their forces and provided more accurate and timely fire and air support to all user-equipped units.

PROGRAM STATUS: With the Army as lead service, an initial sole-source, 4-year contract for the purchase of 11 1/2 systems (6 for the Marine Corps and 5 1/2 for the Army) was awarded on 29 July 1983. The Marine Corps total inventory objective is 13 systems (3 per MAF and 1 for software support and training). A second competitive contract will be awarded in FY-89 to complete attainment of the inventory objective. IOC is planned for November 1987.

DEVELOPER/MANUFACTURER: Hughes Aircraft Company

NAVSTAR GLOBAL POSITIONING SYSTEM (GPS)



DESCRIPTION: The NAVSTAR GPS is a space-based satellite navigation system that provides accurate three-dimensional position and navigation information worldwide. The Marine Corps plans to procure 276 man-pack user equipments, each weighing approximately 17 pounds, to be employed as a complementary system to PLRS. User equipment in USMC aircraft will be funded by the Navy.

PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity	-	-	-	-	186	90	-

WHY IS IT IMPORTANT? The man-pack terminal will be used to anchor the PLRS and provide position location coverage outside the effective area of PLRS (47 Km X 47 Km). Man-pack terminals will also provide position and navigation capability to units operating at less than brigade strength such as a MAU or BLT, and will greatly facilitate command and control of units during amphibious operations.

PROGRAM STATUS: The Marine Corps continues to participate in development and procurement of man-pack terminals. IOC is expected in FY-91.

DEVELOPER/MANUFACTURER: Rockwell-Collins

MARINE INTEGRATED FIRE AND AIR SUPPORT SYSTEM (MIFASS)

DESCRIPTION: The MIFASS is a selectively automated tactical command, control and coordination system that provides for the coordination of mortars, artillery, naval gunfire and direct air support, to achieve more effective and responsive fire support for ground maneuver forces. MIFASS also will provide an automated capability for fire planning with associated weapons and target information management for infantry, aviation and artillery combat operation centers. It will distribute battlefield geometric information such as boundaries, coordination lines and areas, friendly unit locations and air defense data. MIFASS is designed so that selected components may be employed at all echelons of the MAGTF. It will be located at the MAGTF headquarters, the division, the infantry and artillery regiments, the infantry and artillery battalions, and the Direct Air Support Center of the Marine Air Support Squadron.

PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity	-	-	-	LLF	1	1	1

WHY IS IT IMPORTANT? Current manual operations in the coordination and control of supporting arms are slow and inefficient in providing fire support to maneuver elements. The manual operations are often characterized by mistakes, delays, and the improper use of available supporting arms. MIFASS will help to overcome these deficiencies by automating functions currently performed manually. MIFASS will assist the Marine Corps in maximizing its combat potential in the 1990s.

PROGRAM STATUS: The Marine Corps has developed an engineering model. IOC is planned for 1st quarter, FY-93.

DEVELOPER/MANUFACTURER: Norden Systems

TACTICAL COMBAT OPERATIONS (TCO) SYSTEM

DESCRIPTION: The TCO system will provide semiautomated support to MAGTF commanders in the performance of their planning, operations and intelligence functions, down to the battalion and squadron level. TCO will be developed in evolutionary phases and will initially consist of computer software usable on existing, fielded equipment. The TCO system will interface with other elements of the Marine Corps command and control system.

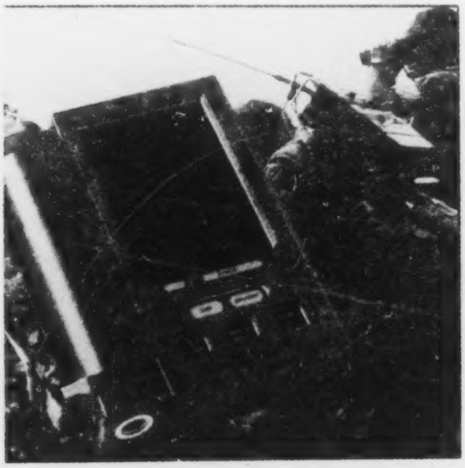
PROCUREMENT PROFILE: TBD

WHY IS IT IMPORTANT? The post-1990 battlefield will be characterized by high mobility, sophisticated weaponry, unit dispersion and rapid speeds of advance. Technology, coupled with arms marketed by many nations, has provided potential adversaries throughout the world with advanced capabilities for rapid planning and execution of operational plans. Improved battlefield sensing and reporting capabilities have created an unprecedented increase in the volume and nature of information available to Marine commanders during operational planning and combat decision making. This increase has exceeded the capacity of current, predominantly manual, combat operations centers to process, filter, discriminate, correlate, organize and display essential information. The TCO system will exploit the benefits of automation to aid the commander in the performance of these functions in a timely manner.

PROGRAM STATUS: The Marine Corps is developing TCO in evolutionary increments designed to build upon current capabilities. The concept development phase will be completed in July 1987. Contingent upon a Milestone III decision, a TCO prototype will be constructed and tested during FY 88-90. The initial dissemination of software will take place at the end of CY-88. The software will be usable on microcomputers and will assist MAGTF commanders in the performance of their planning functions. A fully tactical TCO system will be fielded with an IOC of FY-90. Interoperability with other Marine Corps systems and with other service/NATO command and control systems will be emphasized. Subsequent software and hardware improvements will include combat simulation and artificial intelligence capabilities to further enhance the timely and effective performance of the planning, operational and combat intelligence functions of command by a MAGTF.

DEVELOPER/MANUFACTURER: TBD

DIGITAL COMMUNICATIONS TERMINAL (DCT), AN/PSC-2



DESCRIPTION: The DCT is a programmable, hand-held, input/output device that operates over tactical radio and wireline systems. The DCT is compatible with the BANCROFT and VINSON cryptographic systems. The device weighs 4.5 pounds and is 100 cubic inches. The DCT allows the operator to rapidly compose, edit, transmit, receive and display preformatted, free-text messages and graphic data. The DCT will expand the capabilities of the following systems systems with its speed and accuracy:

- Marine Integrated Fire and Air Support System (MIFASS)
- Tactical Combat Operations (TCO) System
- Direct Air Support Center (DASC)
- Command and Control Communications for Forward Area Air Defense (FAAD) Teams
- Tactical Warfare Simulation, Evaluation and Analysis Systems (TWSEAS)

PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity	1,200	260	581	873	-	-	-

WHY IS IT IMPORTANT? The DCT represents a quantum improvement in speed, accuracy, and reliability of USMC tactical communications.

PROGRAM STATUS: IOC for this program is expected in FY-87. A follow-on procurement contract for FY 87-89 will be competitively awarded.

DEVELOPER/MANUFACTURER: Litton

SINGLE CHANNEL GROUND AND AIRBORNE RADIO SYSTEM (SINCGARS)

DESCRIPTION: The SINCGARS family of VHF radios will replace most VHF/FM manpack and mobile tactical radio communications currently in the Marine Corps. SINCGARS will provide antijam communications in the frequency range of 30.00 to 87.975 MHz with 25 KHz channel spacing. It is mission-flexible for voice or data, plain or cipher text and secure remote control operation. Using the combination of low, medium and high power selections, a frequency hopping electronic counter-counter measures (ECCM) capability, SINCGARS additionally features a low electronic signature to elude current enemy direction finding (DF) equipment.

PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity	-	-	-	-	6,308	6,400	8,300

WHY IS IT IMPORTANT? The Marine Corps is relying upon radio equipment which is over 20 years old and is difficult to support. The present VHF/FM radios are vulnerable to exploitation and interception and are severely degraded when operated in a jamming environment. SINCGARS will accommodate interoperability in joint and combined operations. The new model will offer optimum capability for secure voice communication with minimum weight.

PROGRAM STATUS: The Marine Corps plans to procure the embedded ComSec version of SINCGARS, an improved model of the current radio. Testing is scheduled for FY 89/90.

MANUFACTURER: ITT

TACTICAL COMMUNICATIONS CENTER (TCC)

DESCRIPTION: The TCC is a semiautomatic (computer assisted) tactical message center to be used at Division, Wing, FSSG and MAF/MAB headquarters. It provides for the receipt, storage, routing, distribution, reproduction and transmission of general service record traffic within a command post and to lower, adjacent and higher headquarters. The TCC will terminate data/teletype circuits to AUTODIN, the Naval Telecommunications System, local (within the command post) teletypes or end-user computer terminals. It has the capacity to operate at selectable data rates of 75-2,400 bits per second.

The TCC consists of two major components; the AN/MSC-63A Communications Central and the Reproduction/Distribution Facility (R/DF). Each component can operate independently and is being developed and procured separately. Both components are housed in an 8' X 8' X 10' container. The AN/MSC-63A consists of off-the-shelf hardware items such as computers, video displays, teletypes, disk units, tape units, modems, and Communications Security equipment. The R/DF will contain two commercial reproduction machines, a safe, shredder and printer. The printer can be electronically connected to the AN/MSC-63A.

PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity							
R/DF	31	-	-	-	-	-	-
AN/MSC-63A	-	-	10	10	11	-	-

WHY IS IT IMPORTANT? Current tactical communications center equipment is over 20 years old and is slow, unreliable and increasingly difficult to maintain. It is heavy for amphibious operations, will not interface with emerging digital transmission systems and does not meet user throughput or maximum delay requirements for record traffic.

PROGRAM STATUS: The TCC program is on schedule and progressing smoothly toward the FY-88 procurement. IOC is scheduled for FY-90.

DEVELOPER: AN/MSC-63A - Naval Oceans Systems Center (NOSC)
R/DF - Marine Corps Logistics Base, Albany

HIGH FREQUENCY COMMUNICATIONS CENTRAL (HFCC), AN/TSC-120

DESCRIPTION: The HFCC is a shelter-contained high frequency communication central which will provide two channels of voice and/or data for long-haul communications. It will provide communications from the MAGTF to major subordinate elements, between dispersed units of the MAGTF ACE, and will serve as a backup to the satellite systems in joint and combined operations. The HFCC will be procured using a non-developmental approach to incorporate the most modern high frequency communication equipment available today.

PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity		-	-	-	30	34	35

WHY IS IT IMPORTANT? The Marine Corps currently has limited capability to provide long-haul communications by any means other than satellite. Additionally, communications support for multiple and/or widely dispersed expeditionary airfields is dependent upon low-powered equipment. Thus, current operational capabilities are significantly constrained by the lack of reliable, long-haul communications centrals.

PROGRAM STATUS: Two contract awards for prototype systems are scheduled for the fall of 1987. After prototype evolution, a production contractor will be selected.

DEVELOPER/MANUFACTURER: TBD

END USER COMPUTING EQUIPMENT (EUCE)

DESCRIPTION: The EUCE program will provide computer based equipment such as work stations, word processing equipment, and personal computers to personnel throughout the FMF, Supporting Establishment (SE) and SMCR. Commercial off-the-shelf hardware and software will be acquired to satisfy the needs identified during the requirements analysis. A standard EUCE configuration will be issued to FMF units as T/E equipment. Optional quantities and peripherals can be ordered separately.

PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity	-	3,000	4,000	4,000	4,000	-	-

WHY IS IT IMPORTANT? The end user computing equipment that currently exists throughout the Marine Corps is nonstandard and incompatible. The majority of EUCE is carried as plant property and cannot be deployed. Additionally, the variety of systems that exist throughout the Marine Corps requires that personnel be retrained on different equipment wnen transferred to a new duty station. The EUCE program was developed to address these issues.

PROGRAM STATUS: The EUCE program is essential in order for the Marine Corps to realize productivity enhancement of personnel, standardization and compatibility of EUCE and software, and cost savings and benefits through the quantity purchase of standard items. IOC is targeted for August 1987.

DEVELOPER/MANUFACTURER: TBD

UNIT LEVEL SWITCH (ULS)

DESCRIPTION: The ULS program is a family of switches being developed under the cognizance of the Joint Tactical Communications (TRI-TAC) Office with the Marine Corps as the lead service. The program includes the circuit switches, SB-3865 and AN/TTC-42, and the message switch, AN/GYC-7.

AN/TTC-42: A 150-line transportable, shelterized, automatic switching central. It will provide secure and non-secure digital and limited analog telephone service. It will be operational within major commands.

SB-3865: A team-transportable 30-line automatic telephone switching unit stackable to 90 lines that will service the new family of secure digital telephones. It will be used at regimental and higher levels within the FMF.

AN/GYC-7: The Unit Level Message Switch (ULMS) is a 12-line automatic tactical data switch providing secure switching of digital data. It will be configured into three two-man transportable packages and will be used at regiment and higher FMF levels.

PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity							
AN/TTC-42	-	12	17	18	17	18	15
SB-3865	20	143	85	61	75	75	9
GYC-7	-	-	-	-	90	74	-

WHY IS IT IMPORTANT? The Marine Corps is transitioning from manual, analog, unsecure switch systems to one that has automatic, digital, cryptographically-secure capabilities. The ULS program will provide all of the next generation of USMC switches as well as interoperability in joint and allied operations.

PROGRAM STATUS: A production contract was awarded on 30 September 1986 for the AN/TTC-42 and SB-3865, with options for FY 87-89. AN/TTC-42 options are contingent upon successful completion of a limited operational test that was scheduled for February 1987. IOC for the ULMS is FY-90.

MANUFACTURER: ITT—DCD, Nutley, New Jersey

MAGTF AUTOMATED SERVICES CENTER (MASC)

DESCRIPTION: This program provides a capability for organic automatic data processing support for major MAGTF units when deployed. The MASC replacement is directed toward a capability to support new Information Systems (ISs) while deployed.

PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity	-	-	3	6	4	-	-

WHY IS IT IMPORTANT? Operation of Class I systems (standard ISs in use Marine Corps-wide) for deployed Marine Corps units must be supported by a deployable MASC, similar in function to the Automated Service Centers supporting non-FMF units. MASCs must have the capability to rapidly relocate to provide data processing support to deployed MAGTFs. MASCs depend upon the Marine Corps Central Design and Programming Activities (MCCDPAs) for programming and technical support. As the MCCDPAs transition to new operating systems and new ISs are implemented, support of the newer ISs will require an increased processing capacity.

PROGRAM STATUS: A working group comprised of FMF representatives, functional manager representatives, and C^4 personnel began work during September 1986 to review functional requirements of the deployed MAGTF commander. These functional requirements will be processed into a combat module designed to satisfy the deployed MAGTF commander's requirements. Accordingly, this combat module will be used to size and equip the MASC.

DEVELOPER/MANUFACTURER: It is anticipated that the automatic data processing equipment (ADPE) will be competitively acquired, while the trailers/vans will be acquired from the Army.

TROPOSCATTER RADIO, AN/TRC-170(V)3

DESCRIPTION: The troposcatter radio will provide the capability for super high frequency (SHF) transmission and reception of both multichannel digital voice and data traffic. The AN/TRC-170(V)3 will be used at MAF, division and wing levels, providing intra-MAGTF communications, replacing the AN/TRC-97 and AN/GRC-201 radios. The AN/TRC-170 has troposcatter transmission capability for 32 channels of bulk-encrypted voice, record and data traffic.

PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity	-	-	-	-	-	36	-

WHY IS IT IMPORTANT? If the AN/TRC-170 is not procured, it will be necessary to retain the present AN/TRC-97 in service well beyond its service life. The AN/GRC-201 will not adequately accommodate the expected volume of traffic to be generated within an all-digital communication system. The new command and control equipment being procured will exceed the capacity of multi-channel and switching equipment at higher headquarters.

PROGRAM STATUS: The Marine Corps is participating in this joint program with the Army and Air Force. The initial production contract was awarded in April 1982. Marine Corps IOC is scheduled for FY-93.

DEVELOPER/MANUFACTURER: Raytheon

HAVE QUICK II ANTIJAM COMMUNICATIONS

DESCRIPTION: This program consists of UHF radios (airborne and ground) with a frequency hopping capability to provide a degree of antijam voice communications protection. Incorporation into Marine Corps aircraft and command and control facilities will enhance warfighting capabilities. HAVE QUICK II equipment includes the AN/PRC-113, AN/VRC-83, AN/GRC-171A(V)4, AN/ARC-182, and GPS timing equipment:

- AN/PRC-113 and AN/VRC-83: The standard ground-based portable and vehicular UHF radio which primarily supports close air support operations.

- AN/GRC-171A(V)4: The standard UHF radio supporting command and control agencies within the Marine Air Command and Control System.

- AN/ARC-182: The standard Navy airborne VHF/UHF radio which will incorporate both the HAVE QUICK II and SINCGARS frequency hopping algorithms.

- GPS TIMING EQUIPMENT: This equipment will provide frequency synchronization or time of day which is required for HAVE QUICK II operations. The timing source for HAVE QUICK II will be the GPS system.

PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity							
AN/PRC-113	1,550	-	-	-	-	-	-
AN/VRC-83	725	-	-	-	-	-	-
AN/GRC-171A(V)4	64	-	-	-	-	TBD	-
AN/ARC-182	-	-	-	-	-	TBD	-
TIMING EQUIPMENT	-	-	-	-	TBD	-	-

WHY IS IT IMPORTANT? HAVE QUICK II provides reliable antijam UHF communications which allows us to operate in a jamming environment.

PROGRAM STATUS: This is an Air Force development program. Individual equipment IOCs begin in FY-86. A system IOC will be attained in FY-91. These programs are on schedule.

MANUFACTURER/DEVELOPER: Magnavox and Rockwell International
Collins Telecommunications

AN/TSC-96 PRODUCT IMPROVEMENT PROGRAM (PIP)

DESCRIPTION: The AN/TSC-96 is a UHF communications satellite terminal which provides a deployed MAGTF with access to the Naval Telecommunications System using fleet satellite (FltSat) and leased satellite (LeaSat). Currently 10 systems are in service, three each with the active communications battalions and one for training. These items have been used extensively since 1981 and consist of naval modular automated communications sub-system (NAVMACS) components which have been installed in two shelters. The AN/TSC-96 provides access to the Common User Digital Exchange (CUDIX) net for record traffic, secure voice net, fleet broadcast, and a low-speed teletype net. However, with the availability of satellite channels becoming a critical issue, the AN/TSC-96 must be modified to keep pace with improvements being made by the Navy to the CUDIX system so as not to loose interoperability. The PIP will consist of the following:

- Replace old teletype/printer equipment with new standard AN/UGC-74C USMC teletypewriters.

- Replace old ComSec devices with Navy standard ComSec equipment to retain interoperability.

- Add the TD-1271B Demand Assigned Multiple Access (DAMA) modem to retain interoperability with the Navy and make more efficient use of the limited UHF satellite communications capacity.

- Repackage components into one 10 foot ISO shelter to obtain a saving of cargo space during air/sea lift.

PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity	-	-	-	10	-	-	-

WHY IS IT IMPORTANT? The AN/TSC-96 provides the primary access to the NTS for record traffic to the deployed MAGTF. It is a high speed, dependable system which can be used from almost any location on earth. The secure voice telephone allows passage of critical information between command elements ashore and those afloat in real time. The fleet broadcast network provides a wide range of weather and other information of interest to the MAGTF.

PROGRAM STATUS: Naval Electronic Systems Engineering Center, Vallejo, California is currently developing a prototype. Testing will occur in 1988 and production will commence in 1989. All 10 systems will be modified by late 1990.

DEVELOPER/MANUFACTURER: Marine Corps Logistics Base, Barstow, California

Part 2

Intelligence

Introduction

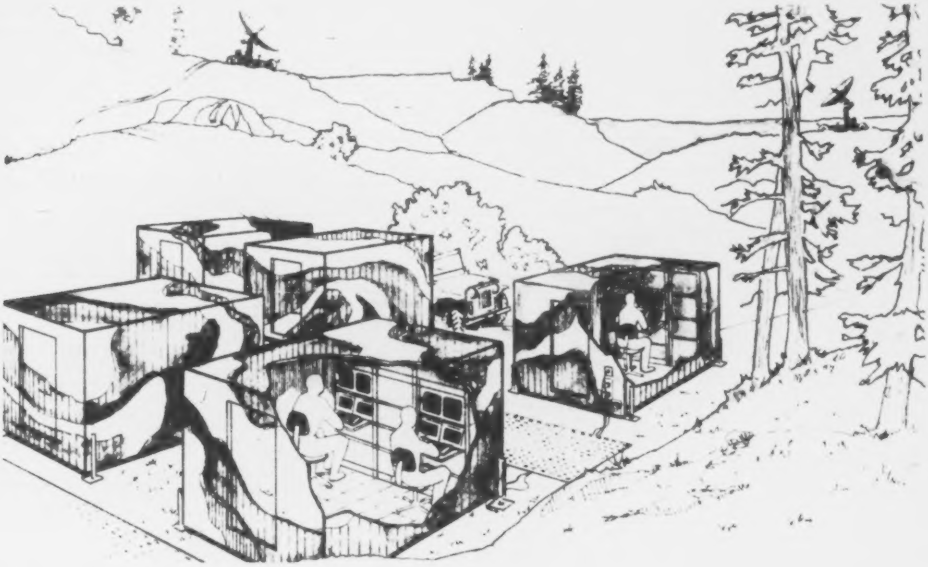
This section contains summary papers on the major Marine Corps intelligence system programs under development. These programs and the intelligence systems already fielded comprise the MAGIS. As new intelligence systems come under development and old systems are retired, MAGIS will continue to evolve.

These summary papers describe systems which will support the MAGTF commander in the areas of imagery intelligence (IMINT); signals intelligence (SIGINT), to include communications intelligence (COMINT) and electronic intelligence (ELINT); counterintelligence (CI); intelligence management at the MAU and MAB levels; electronic warfare (EW); unattended ground sensor intelligence; and battlefield surveillance.

The new systems described herein emphasize the coming of age of Marine Corps intelligence. This modernization effort uses state of the art technology to provide near-real-time intelligence information in response to the MAGTF commander's urgent intelligence requirements.

ALL SOURCE IMAGERY PROCESSOR (ASIP)

DESCRIPTION: The ASIP is a mobile ground processing facility designed to receive and exploit in near-real-time Side Looking Airborne Radar (SLAR), Infrared, and Electro-optical (EO) imagery from reconnaissance systems, carried on reconnaissance aircraft, as well as imagery received from national and theater sources.



PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity	-	-	-	-	2	4	2

WHY IS IT IMPORTANT? The current Marine Corps capability for processing and exploiting imagery is dedicated to hard copy (film based) products. Now the thrust of technology is to near-real-time soft-copy, digital imagery, which is data linked from the sensor platform to the processing facility. Soft-copy imagery exploitation allows the photo interpreter to extract much more information than is normally attainable from film-based imagery. Data-linked digital imagery, soft-copy, computer-enhanced image exploitation and the increasing amount of digital imagery expected to be available in the future, requires that the Marine Corps move forward in the acquisition of a mobile ground processing facility able to be deployed with the MAGTF. The Marine Corps will purchase eight systems to replace the Imagery Interpretation Facilities at the three Force Imagery Interpretation Units and for training and software support.

PROGRAM STATUS: In March 1986 three corporations were selected to compete for FSD. Contract award for FSD is scheduled for July 1987. A production decision is expected in the 4th quarter FY-89. IOC is scheduled for 2d quarter FY-91.

DEVELOPER/MANUFACTURER: Air Force/TBD

INTEGRATED SIGNALS INTELLIGENCE SYSTEM (ISIS)

DESCRIPTION: ISIS is a a modular, transportable, semiautomated system that will give the Marine Corps a modernized and viable ground-based COMINT system which will be an integral part of combat intelligence operations. ISIS consists of two discrete functional capabilities--a front end collection and direction finding (DF) system (previously known as the Communications Collection Outstation) and a back-end analysis, processing, data base and reporting system (previously known as the Stand Alone Analysis System (SAAS)). The SAAS functions will be accomplished by procurement of the AN/TSQ-130V Technical Control and Analysis Center (TCAC). The ISIS collection and DF capability will be satisfied by an available off-the-shelf system, such as the AN/TRQ-32.

PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity							
CCO	-	TBD	-	-	-	-	-
TCAC	-	5	-	-	-	-	-

WHY IS IT IMPORTANT? With the advent of increased battlefield electronics usage and the increased tempo of combat, the Marine Corps considers computer assistance to tactical SIGINT, as incorporated in the ISIS, to be crucial for future Radio Battalion SIGINT support to MAGTF commanders. If the ISIS is not available in the field in the late 1980s time frame, the Marine Corps' SIGINT direct support capability will be severely degraded. The Marine Corps has a vital requirement for tactical SIGINT direct support at battalion level and above. This support must be tailored to the battlefield commander's intelligence needs during all phases of amphibious operations and subsequent operations ashore.

PROGRAM STATUS: TCAC acquisition is being supported by a Congressional reprogramming action. Procurement contract actions will be performed by the Army Joint Tactical Fusion Program Management office. IOC is planned for 2d quarter FY-88. CCO alternatives are being evaluated by CG, MCDEC and Director, NSA to support a 2d quarter FY-87 Milestone IIB decision regarding objective system selection.

DEVELOPER/MANUFACTURER: CCO - TBD
TCAC - RCA Corporation, Burlington, Massachusetts

ELECTRONIC INTELLIGENCE (ELINT) SUPPORT SYSTEM (ESS)

DESCRIPTION: The ESS is a modularized, semiautomated, transportable, tactical ELINT system capable of intercepting, locating, analyzing and identifying enemy ground-based, noncommunications emitters. The initial development system will consist of three ground-based, ELINT Collection Outstations (ECOs) mounted on an organic radio battalion tactical vehicle. Each ECO is a computer-controlled, monopulse, precision line-of-bearing (LOB) and signal identification system designed to operate as a stand-alone system. It can provide information on target emitters within its field of view directly to the TCAC segment of the ISIS. System capabilities include an airborne collection platform (ACP) to be digitally netted with the ground system. The ACP will collect, analyze, process, and distribute data to the ground-based ECOs for signal correlation, analysis and reporting.

PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity							
ECO	-	-	-	3	7	-	
ACP	-	-	-	-	3	5	

WHY IS IT IMPORTANT? The FMF radio battalion presently does not possess the capability to perform collection or exploitation of noncommunications threats. The ELINT system previously used in the FMF, the AN/TSQ-76, was issued on an interim basis pending development of an advanced system. It was obsolete in design, inadequate in frequency coverage, difficult to maintain, and lacked the mobility required to provide and maintain timely support to the MAGTF. It was deleted from the inventory in 1975. Employment of the ESS will fill a critical gap in the Marine Corps requirement to provide tactical SIGINT direct support at battalion level and above.

PROGRAM STATUS: UTL Corporation is presently completing the engineering design phase of ECO. Integration and testing will occur on the three prototypes 3d quarter FY-87. Preliminary design for the airborne aspect has been completed and contract proposals are scheduled for 2d quarter FY-87. Ground segment IOC is planned for 2d quarter FY-91, with airborne IOC in 1st quarter FY-92.

DEVELOPER/MANUFACTURER: UTL Corporation, Dallas, Texas

ADVANCED MARINE AIRBORNE SIGNALS INTELLIGENCE (SIGINT) SYSTEM (AMASS)

DESCRIPTION: AMASS is a mobile, tactical SIGINT system which will extend the range of Marine Corps passive SIGINT detection capability. The system will consist of an organic RPV-based airborne collection and direction finding package and a ground control and processing station. Data received by AMASS will be processed and disseminated to the MAGTF commander as well as to appropriate operations centers.

PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity	-	-	-	-	-	2	2

WHY IS IT IMPORTANT? Although the Marine Corps possesses a limited non-real-time ELINT/Electronic Warfare Support Measures (EWSM) capability in its fixed wing EW squadron, the bulk of cryptologic direct support to the MAGTF is provided by the ground-based radio battalion. AMASS will provide highly perishable information from organic airborne SIGINT systems reconnoitering in the area of operations. The Marine Corps has the requirement to provide SIGINT data to all elements of the MAGTF. AMASS will fill a critical gap in the Marine Corps to provide signals intelligence beyond the ranges now possible with ground-based SIGINT collectors.

PROGRAM STATUS: The Marine Corps, Army and NSA are executing a joint program to integrate non-developmental item technologies into an RPV platform to demonstrate SIGINT applications. Once design efforts are complete, each service will apply the technology to its unique programs. Initial demonstration of capability is scheduled for 4th quarter FY-87. IOC is planned for 1st quarter FY-94.

DEVELOPER/MANUFACTURER: TBD

TEAM PORTABLE COMMUNICATIONS INTELLIGENCE (COMINT) SYSTEM (TPCS)

DESCRIPTION: TPCS is a highly mobile man- or team-pack system capable of performing automated collection, direction-finding, processing, analysis, reporting, disseminating and collection management functions.

PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity	-	-	-	-	-	1	1

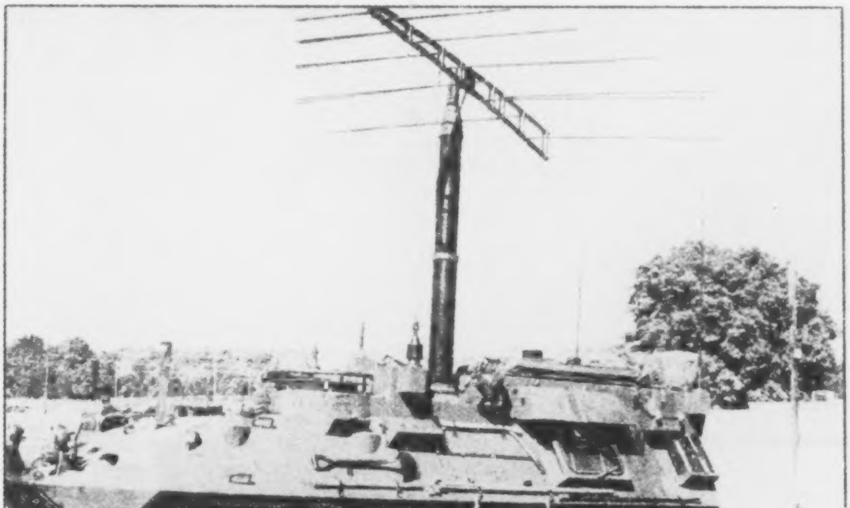
WHY IS IT IMPORTANT? TPCS will be a logical continuation of current manpack receiver and DF system acquisition efforts and will fill a void in current SIGINT direct support efforts, especially in the initial phase of the amphibious landing.

The radio battalions are to provide timely and accurate tactical SIGINT to the MAGTF commander. This support is currently performed by independent systems that are tied together via secure communications. TPCS will provide flexible intra/intersystem communication and a microprocessor terminal that will enable the radio battalions to provide support to smaller MAGTFs; e.g., MAU, when larger systems are not available or appropriate.

PROGRAM STATUS: A formal acquisition strategy was published 1st quarter FY-87. Eventual system integration will include non-developmental items to the maximum extent possible using technology developed by independent contractors as well as service/agency laboratories. Milestone I is scheduled for 2d quarter FY-87. IOC is planned for 1st quarter FY-91.

DEVELOPER/MANUFACTURER: TBD

MOBILE ELECTRONIC WARFARE SUPPORT SYSTEM (MEWSS)



DESCRIPTION: The MEWSS is an electronic warfare system capable of rapid mobility over all types of terrain, with an amphibious capability. The MEWSS' electronic suite consists of a direction finder set, a jammer, and intercept receivers installed in a LAV chassis. The system is designed to provide MAGTF commanders with the capability to detect, determine LOB, and degrade enemy tactical communications during the amphibious assault and subsequent operations ashore, to include mechanized operations. This multiple capability is enhanced by the LAV's light armor protection.

PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity	-	12	-	-	-	-	-

WHY IS IT IMPORTANT? The Marine Corps currently has no lightly armored or mobile electronic warfare capability. The MEWSS will provide the ability to support mobile operations, both in the AOA and during subsequent operations ashore.

PROGRAM STATUS: System integration and operational testing was succesfully completed in the 4th quarter FY-86. Milestone IIIB was scheduled for 1st quarter FY-87. IOC is planned for 4th quarter FY-88.

DEVELOPER/MANUFACTURER: TACOM/General Motors Company, Ontario, Canada

COUNTERINTELLIGENCE AND SECURITY EQUIPMENT (CI&SE)

DESCRIPTION: The CI&SE program consists of three subprojects: the technical surveillance countermeasures (TSCM) program, counterintelligence equipment program (CIEP), and the counterintelligence communications system (CCS) program. The CI&SE program is designed to provide specialized material to FMF counterintelligence teams (CITs) which will be used to improve the CITs' capability to collect, analyze and disseminate information, conduct counterintelligence operations, carry out the anti/counterterrorist mission and improve the quality of overall support to MAGTF organizations.

FUNDING PROFILE: $ Thousands	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
TSCM	-	133	591	-	-	-	-
CIEP	-	OT&E	OT&E	OT&E	OT&E	-	-
CCS	-	-	-	1,247	-	-	-

PROGRAM STATUS: The Marine Corps will procure the items of equipment requested in the current program. The CSS will undergo developmental test/operational test in FY-87. IOC is expected in FY-89.

DEVELOPER/MANUFACTURER: TSCM-TBD (various)
CIEP-TBD (various)
CCS-Marine Corps

TACTICAL REMOTE SENSOR SYSTEM (TRSS)

DESCRIPTION: TRSS is an unattended ground sensor set of equipment that provides real-time information on enemy movement, force structure, and speed and direction of movement during amphibious operations and follow-on operations ashore. The set of equipment consists of hand- and air-emplaced sensors, monitors and radio relays. The USMC has a current set of equipment, referred to as Phase III, which satisfies current ground sensor requirements. TRSS is the follow-on sensor set that will replace the current sensor set in the 1990-92 time frame. The prime objective of this project is to decrease the bulk, weight, and unit cost of system components through the exploitation of microminiaturization. Components of the TRSS are listed below:

- Sensors. TRSS will be a complete suite of equipment which will incorporate hand- and air-emplaced sensors that use a variety of detection techniques. Currently, seismic, acoustic, magnetic and infrared techniques are employed. This project uses these techniques as a baseline, and will investigate other potential methods such as imagery sensors. Sensors for special purposes, to include NBC warning, will be evaluated.

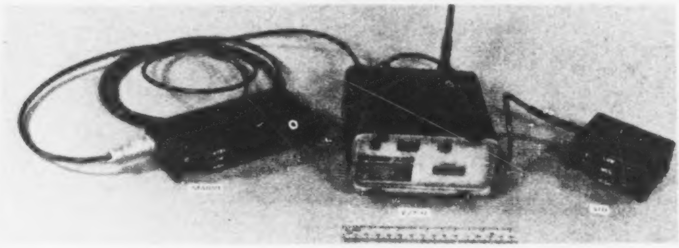
- Monitors and Relays. Monitors provide readout and recording of sensor data, and relays extend the operational range of the system by extending radio frequency line-of-sight between the sensor field and the monitor site.

PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity	-	-	-	-	4	-	-

WHY IS IT IMPORTANT? TRSS replaces existing sensor equipment which is reaching the end of its service life.

PROGRAM STATUS: Fabrication of advanced development models was completed in FY-86. Developmental and operational testing I will be completed in the 2d quarter FY-87; a decision to transition into FSD is expected by 30 April 1987. IOC is scheduled for FY-91.

DEVELOPER/MANUFACTURER: Sandia National Labs, Albuquerque, New Mexico
Naval Avionics Center, Indianapolis, Indiana



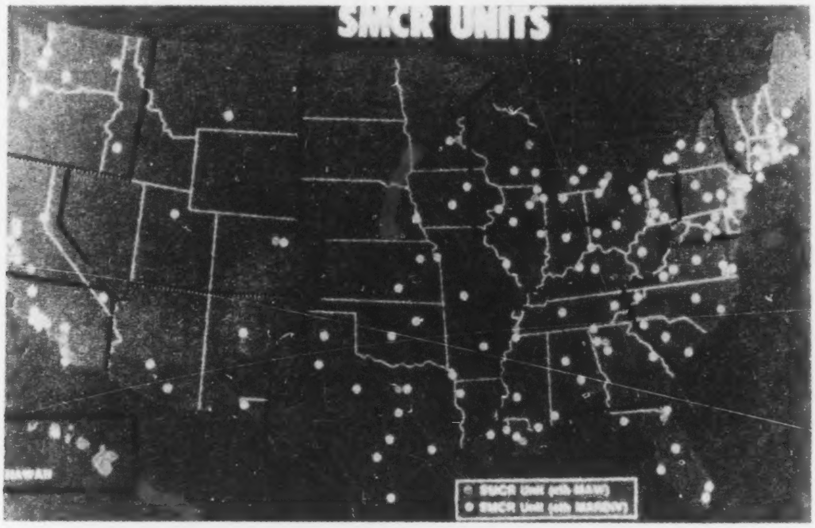
magnetic intrusion device
encoder/transmitter unit
seismic intrusion device

CHAPTER V

THE MARINE CORPS RESERVE

Introduction

Active force capabilities in the Marine Corps are primarily determined by the responsiveness and deployability required of three active MAFs. In this context, requirements for regular manpower are driven by peacetime commitments, forward deployments, rapid deployment criteria and the need for a rotation base. In broad terms, the reserve complements this force with a capability to rapidly expand structure by one third and increase trained manpower by one half. Considered as a total force, 25 percent of the combat structure and 33 percent of the trained manpower are in the reserve. Pictured below are the Selected Marine Corps Reserve (SMCR) units in CONUS and Hawaii. Other units are located in Alaska and Puerto Rico.



Training, Readiness and Support of the Active Forces

Aggressive and extensive training programs are conducted within the Marine Corps Reserve for the purpose of enhancing its warfighting capability. Training is directed at both the SMCR and Individual Ready Reserve (IRR) to ensure trained units and individuals are available upon mobilization.

Perhaps the most important aspect of SMCR training is its exercise program. The effort devoted to MOS and other individual training, attendance at formal professional schools and unit training culminates in the conduct of exercises. Exercise participation affords reservists the same opportunities as their regular counterparts to develop and maintain skills in command and control, fire support coordination, amphibious planning/execution, and fire and maneuver. The 4th MarDiv, 4th MAW, and 4th FSSG maintain an active exercise cycle which each year includes two combined arms exercises (CAXs) and battalion or larger size cold weather, mechanized, amphibious landing, mountain and artillery fire exercises. Emphasis is placed on maximum participation in integrated exercises; i.e., those which involve both active and reserve component units, in order to increase the integration and interoperability of both components. A 5 year plan has been developed by the SMCR in conjunction with the force commanders to increase SMCR unit participation in active component exercises.

During 1986 approximately 20,000 selected reservists participated in major exercises within CONUS and abroad. Many of these were integrated with the active component; e.g., Alpine Warrior (Wisconsin), Red Flag (Nevada), Bold Eagle (Florida), Blazing Skies (New Mexico), Northern Wedding/Bold Guard (Denmark/West Germany), Anchor Express (Norway), Display Determination (Mediterranean), and Team Spirit (Korea). An ambitious exercise schedule will be conducted in FY-87 and will include two CAXs as well as these other exercises: Kernal Blitz (California), Solid Shield (North Carolina), Distant Hammer (Mediterranean), Display Determination (Mediterranean) and Cold Winter (Norway).

Exercise Solar Flare is a particularly significant 1987 exercise for the reserve component; for the first time, an SMCR MAB-sized MAGTF will be placed under the operational control of a force commander. The reserve 2d MAB reported to FMFLant in August 1986 for exercise planning and will be chopped to CG FMFLant for operations at an appropriate time during 1987. The exercise will include two MABs, one from each component, and will allow the two MABs to oppose each other in a force-on-force exercise scenario. Both MABs will be integrated; i.e., their subordinate elements will consist of both active and reserve component units. Exercise Solar Flare is a classic application of Total Force policy and will make a significant contribution to the interoperability of our active and reserve components.

Participation in the Marine Corps Combat Readiness Evaluation System (MCCRES) is an important feature of the SMCR training program and is one method used to evaluate combat readiness. Reserve units are routinely assessed with the same criteria used to evaluate their active component counterparts. During FY-86, 14 battalion/squadron size SMCR units were administered the MCCRES test, and each was evaluated as combat ready. The FY-86 test results are especially significant when one considers the limited time available for reserve unit training.

Mobilization Operational Readiness Deployment Tests (MORDT) are administered to SMCR units to assess their capability and readiness to mobilize. The tests are administered by teams from the 4th MarDiv and 4th MAW Headquarters to their subordinate units over a 3 day period (Friday-Sunday) with 3 day notification (Tuesday). Each test includes recall of the entire unit and packing and staging all equipment and supplies for shipment. Some tests involve loading all staged equipment and supplies aboard local commercial transportation (MORDT/Load Out). Other tests involve an actual deployment of the entire unit to a military installation which is frequently several hundred miles from the unit's home training center. During FY-86, 111 SMCR units underwent a MORDT; 91% were evaluated as ready.

Support for the active component is an important facet of the reserve program. The Selected Augmentation Unit (SAU) program is a recent initiative designed to support the active component by providing selected reservists to man regular FMF structure which cannot otherwise by staffed because of active component end strength restrictions. The SAU program entails the use of SMCR units, or portions thereof, which have no requirement to augment or reinforce

I, II, and III MAF, to occupy unmanned structure in like type active FMF units with significant personnel deficiencies. The SMCR units will conduct additional temporary duty (ATD) each year with the same regular FMF unit. Upon mobilization, the reserve unit reports to, joins, and deploys with "its" active component unit. The program is intended to be conducted on the unit level and develop a strong, long-term relationship between supporting SMCR units and supported regular units. The SAU program will be implemented in FY-87 with units from 1st, 2d, 3d and 4th FSSGs. Approximately 2,000 reservists from 4th FSSG will participate. It is anticipated that the program will be expanded to include combat and combat support units within the next year and ultimately will include about 8,000 reserve participants.

In addition to the SAU program, a substantial portion of the reserve training programs are designed to accomplish two objectives: provide training for reservists while simultaneously supporting active component FMF units. The exercise support and reserve counterpart training (RCT) programs are used as much to assist active component units as to provide training to individual reservists and reserve units. Several examples illustrate this relationship. Most participation in the RCT program is generated by requests from regular units for support during periods when unusually heavy workloads or personnel shortages are anticipated. During FY-86, 3d and 4th Air/Naval Gunfire Liaison Companies (ANGLICOs) in the reserve component participated in several joint/combined active component exercises in and out of CONUS to assist the heavily committed active ANGLICOs to meet requirements. The 4th MAW supported MCASs Futenma and Iwakuni, Japan during the last two Team Spirit exercises by providing detachments over a 3 month period to help operate station airfields and dining facilities. Annual training duty is also used to support the active component when a need can be matched with a training opportunity; e.g., 4th FSSG provided reservists to help operate the III MAF post office during a period of personnel shortages. The 4th MAW used a combination of ATD and drill periods during FY-86 to provide approximately 700 hours of aerial refueling support for our active component wings and support for 2d Fleet exercises in the Caribbean. As a further example of support, two squadrons from 4th MAW assumed contingency missions for two active component counterparts during FY-86 while they transitioned from one aircraft to another.

The activation during FY-86 of VMFT-401 at MCAS Yuma, Arizona is an especially significant example of reserve support for the active component. This 4th MAW squadron will be equipped with F-21A Israeli KFIR fighter aircraft and manned by reserve Marines. The squadron will provide training for squadrons in both components in adversary fight tactics. Initial delivery of aircraft will occur in April 1987, and it is anticipated the squadron will be fully operational by late FY-87/early FY-88.

Training for members of the IRR is accomplished through three programs. One of these is the exercise support program, which is designed to provide individuals the opportunity to participate in major exercises conducted under the cognizance of FMFLant and FMFPac. The individual reservist is assigned to an active component FMF unit and performs duties appropriate to his/her MOS as a member of the unit for the duration of the exercise. For example, during 1986 15 reservists joined the 9th MAB staff and participated in exercise Yama Sakura in Hokkaido, Japan, and 120 members of the IRR joined various commands in III MAF to participate in Exercise Team Spirit in Korea.

Another means for IRR training is through the RCT program, which is designed for the IRR to provide its members the opportunity to train in their MOSs with their active component counterparts. It is similar to the exercise support program in that members of the IRR join an active component unit to work in their MOSs alongside their regular Marine counterparts. The reservists receive their training by assisting their counterparts in accomplishing the typical daily work assigned an FMF unit.

Attendance at professional schools is the third method of training the IRR. These opportunities provide formal professional development training similar to that offered to regular Marines. The courses are designed to accommodate the standard 2 week period of annual training duty. Reserve courses are conducted by the Landing Force Training Commands on each coast, Amphibious Warfare

School and Command and Staff College at MCDEC and several schools of the other military services.

The IRR population is anticipated to increase to 75,000 by FY-91. The increases result from the recently instituted 8 year military service obligation and presents a significant challenge to insure MOS proficiency through the conduct of refresher training. The RCT program will become the primary vehicle for accomplishing this training. A refresher training pilot program will be conducted in FY-87. A significant expansion of the RCT program is anticipated in FY-88 to satisfy the requirement for IRR MOS refresher training.

Budget

The Reserve PresBud 88/89 request for $366.1 and $387.8 million respectively will support both enhancement initiatives and an SMCR end strength of 43,700 in FY-88 and 44,500 in FY-89. This funding represents about 3.8 percent of the total Marine Corps budget in both years and a real growth of approximately 12 percent. The total real growth is in the O&MMCR appropriation.

Significant programs included in the FY 88/89 Reserve budget are initial issue of improved NBC and cold weather clothing; funding to support activation of the 4th LAV Battalion, Target Acquisition Battery and TOW platoons; Full-Time Support (FTS) strength increases of 351/292; and instructors to support training of Marine reservists at formal schools.

Conclusion

The Marine Corps Reserve is a vital dimension of the Corps' Total Force. High morale and the dedication of its Marines are major strengths. Requirements to improve present and future capabilities have produced some crucial objectives, primarily in manpower and equipment. The approach towards achieving these objectives can be summarized in a three-pronged strategy.

- First, to continue with substantial efforts in recruiting, training, and retaining quality Marines.

- Second, the momentum of force modernization must continue. State of the art equipment and modern training facilities are extremely important.

- A final key to enhancing reserve capabilities is continued emphasis on active/reserve integration.

Total Force, with separate but complementary active and reserve contributions, is a vital, established reality in the Marine Corps.

CHAPTER VI

MANPOWER AND QUALITY OF LIFE

Introduction

Despite the allocation of significant resources to modernization programs, the Marine Corps has not neglected its most important asset--the individual Marine and the Marine's family.

Our first priority continues to be the accession and retention of high quality individuals. Recruiting and retention statistics for FY-85 and FY-86 bode well for the future and should ensure that the individual, combat-trained Marine remains our most valuable asset.

Quality of life (QOL) is the total of those factors which contribute to the standard of living for service members and their families. It includes:

- Pay, allowances and military pay tax advantages.
- Medical and dental benefits.
- Family housing investment, operations and furnishings.
- Commissary and exchange support.
- Leave and retired pay accrual.
- Morale, welfare and recreation funds.
- Bachelor housing construction, operations and furnishings.
- G.I. Bill and VEAP benefits.
- Off-duty education assistance.
- Legal assistance.
- Space available transportation.
- Other personnel support programs, including family service centers, employment resource centers, child care programs, dependent schools, drug and alcohol abuse prevention, family advocacy, casualty assistance, community services, chaplain support, base libraries, base newspapers, etc.
- Non appropriated funds.

This chapter will discuss our manpower program and three key elements of QOL in more detail: military construction, bachelor enlisted quarters (BEQs), and family housing.

Part 1

Manpower

End Strength

The determination of military manpower requirements is a part of the continuous comprehensive requirements determination process based on the approved national strategy and DG. The analysis considers traditional functions and missions to determine a requirement for manpower first of all using a structure designed for minimum risk. This minimum risk force is unconstrained by fiscal and manpower limitations. The minimum risk force is then refined to a planning force consistent with a reasonable level of risk. This planning force is judged capable of executing the Marine Corps mission for the national military strategy, and represents the mid-range objective described in the current MMROP. This plan presumes a peacetime draft and 180 days of mobilization.

In recognition of existing fiscal constraints, the planning force, as a mid-range objective, is further pared down to the force levels required immediately for war. Such force levels comprise the programmed structure and provide the specific requirements for program development, as well as for measuring immediate readiness for war. The FY-89 defense authorization includes the resources for a Marine Corps end strength of 200,100.

The program to support new requirements attempts first to correct existing skill deficiencies and then to achieve the new manning levels by sustaining an aggressive recruiting and retention program and a relatively level non-prior service accession demand.

The end strength profiles are displayed in thousands below:

	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Officer	20.3	20.3	20.3	20.3	20.3	20.3
Enlisted	179.3	179.3	179.8	180.3	181.3	182.6
	199.6	199.6	200.1	200.6	201.6	202.9

Recruiting and Retention

The Marine Corps is presently enjoying a period of unprecedented success in the areas of retention and recruiting. This level of success, in large measure, determines readiness of the Corps both today and for the future. The Marine Corps continues to pride itself on planning for and providing the right force, both in quality and quantity, to meet our unique missions and responsibilities. Our plans for FY-87 primarily built on the success achieved the previous year, attempting to refine programs and procedures to maintain a high level of readiness.

We continue to experience high retention in our officer corps. Additionally, during FY-86, 1,767 high-quality lieutenants and warrant officers were accessed. These trends in officer retention and accessions are expected to continue through FY-87.

In FY-86, over 99 percent of the regular male non-prior service recruit accessions scored in the upper three categories of the Armed Forces Qualification Test (AFQT), and over 97 percent of the accessions were high school graduates.

Total reenlistments remain strong in both number and quality. Retraining well-qualified and proven Marines raises the leadership and experience levels of the force. This, combined with controlled use of the Selective Reenlistment Bonus (SRB) program and a lateral movement program, contributes significantly to lowering skill imbalances throughout the Corps.

Field commanders also benefit from the force "aging" process enjoyed today, which builds on better retention, providing more experienced and qualified Marines at every level of responsibility. A consequence of "aging" is growth in the married population. In FY-86 44% of our active duty Marines were married. This higher incidence of marriage and improved retention provides a stabilizing influence on the force as a whole. One reason for the aging is an increased emphasis on longer enlistment and reenlistment contracts. Only 70 percent of our recruits in FY-81 entered under four to six year contracts; over 99 percent were recruited for these longer periods in FY-86. This same emphasis is being placed on reenlistments.

The Marine Corps continues on a steady and successful course of commissioning and enlisting quality young Americans. As mentioned, we enjoyed unqualified success in FY-86 recruiting. As officer strengths remain relatively stable, only 1,710 new officers will be required in FY-87, 1,819 in FY-88 and 1,831 in FY-89. Similarly, despite planned growth in enlisted strength, only about 35,100 new Marines will need to be enlisted in FY-87, 35,551 in FY-88 and 30,560 in FY-89.

With respect to accessions in FY-87, we will enter the year well poised to maintain the momentum, starting with 58 percent of the total enlisted force requirements in the Delayed Entry Program (DEP) pool. Additionally, over 99 percent of those in the DEP are high school graduates and seniors.

We have never been more ready to fulfill our role as the nation's force-in-readiness. We have attained unprecedented heights of quality while surpassing every retention and accession goal. Our Corps today is not an accident, but a product of long-term planning, support and leadership of which we can be proud.

As we look to the future, the continuing decline in the youth population of military age, the expanding gap between military and private sector pay, and a declining trend in enlistment propensity pose difficult recruiting challenges for the future. To respond to increasingly difficult conditions, we must provide adequate recruiting resources and enlistment incentives for the Marine Corps. We are confident that, with these actions, we can continue to meet our manpower needs with volunteers.

Part 2

Quality of Life

Military Construction (MCON)

In FY 88/89, the Marine Corps Military Construction fund request is $313.2 and $322.2 million respectively. The funding reflects a balanced program with projects distributed as follows:

	FY-88	FY-89
Operations and Training	18%	22%
Maintenance	26%	29%
Quality of Life [BEQs, community facilities]	38%	41%
Other (Supply and storage, utilities)	18%	8%

Once again this year, QOL projects continue to represent the largest single category in the MCON program. The lion's share of these projects were BEQs which provide 4,030 spaces in FY-88 for Marines at six different activities and 4,668 spaces for Marines at seven different activities in FY-89. These new BEQ spaces all conform to the current DOD guidelines of two-room modules with an adjoining bath. The remaining projects in this category in FY-88 includes one mess hall rehabilitation and in FY-89 includes eight child care centers, two physical fitness center additions, one mess hall and a multi-purpose facility.

Emphasis on maintenance facilities remains high. Corps-wide, 12 maintenance projects are being requested in FY-88 and 26 projects in FY-89. These will enhance the ability to maintain our existing equipment plus provide additional spaces to support new equipment coming on-line. Almost every tactical Marine activity will be getting at least one new maintenance facility to support new equipment such as the F/A-18, AV-8B, LAV, or M-198.

Facilities to house Combined Arms Staff Trainers (CAST) for Marine Corps Base Camp Lejeune and Marine Corps Air Station (MCAS) Kaneohe Bay are being requested in FY-89. Additionally, MCAS New River and MCAS Cherry Point have projects that will house state of the art flight simulators and weapons trainers which will enhance all phases of training for pilots.

Security consciousness in the Marine Corps is a key factor in protecting both Marines and our limited physical assets. As such, flight line security projects at MCAS El Toro, MCAS Iwakuni, MCAS Yuma and MCAS Futenma will improve security for aircraft assigned to these activities.

Funding	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
($ Millions)	262.8	313.2	322.2	378.1	378.0	400.2

Bachelor Enlisted Quarters (BEQs)

The Marine Corps follows the DOD policy of providing suitable accommodations for all bachelor military personnel required to reside aboard the activity for military necessity, and for those personnel who reside aboard the activity when suitable accommodations are not available in the local community. Government quarters will not be built for officers and staff noncommissioned officers who are not required to live aboard for military necessity or for whom suitable private accommodations are available.

To implement this policy, we have programmed approximately 36 percent of our annual MCON budget for BEQs. With the completion of the FY-86 program, our inventory of adequate enlisted billeting spaces will be approximately

80,882 through new construction and modernization of existing quarters. Displayed below is the planned profile for this program:

	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Number of Adequate Spaces Planned to be Added During Year	3,982	4,030	4,668	3,090	4,195	2,576
Cost of New Construction/ Modernization ($ Millions)	69.1	107.8	100.5	30.6	89.3	71.9

Family Housing

CMC has the management responsibility for approximately 20,000 family housing units and 625 mobile home spaces throughout the United States and Japan. We are continually building new units where deficits exist, particularly in southern California. During the period 1981-1986, 1,979 new family housing units were constructed, are currently under construction or have been approved. Additionally, 632 new units will replace the aged inventory of Sterling Homes located near Camp Pendleton. This is a very special project in that we are building strictly for privates through lance corporals. The construction program proposed for FY-87 includes building 300 mobile home sites at four locations. Additionally, 80 more mobile home sites are programmed for the FY-88 construction program. Marines often buy a mobile home and are transferred to an area such as southern California where only limited off-base sites exist. Construction of more mobile home spaces will offer a Marine both that "chance" to buy if he so wishes and also a place to move this home when transferred.

The major repair program has tremendously affected our homes by renovating our existing inventory. Whole house rehabilitation for over 8,000 homes has been conducted since FY-81. Plans exist for an additional 5,000 whole house rehabilitations in the next 5 years. Places such as Midway Park at Camp Lejeune, Ribout Village at Parris Island, Namar Housing at El Toro and housing at Cherry Point have been or are undergoing whole house repairs. These homes are exclusively used by privates through lance corporals.

The family housing improvement program also improves QOL. Through this program, patios and dishwashers are being added to homes and athletic facilities are programmed.

Based on current known deficits, the Marine Corps construction program in numbers of units is identified below:

Activity	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
MCAS El Toro		100	100	-	-	-
MCAGCC 29 Palms	392	100	100	-	-	-
MCB Camp Pendleton		268	332	550	550	550
TOTAL	392	468	532	550	550	550

The major repair program which is accomplished within the maintenance program will provide the needed renovations. Funds programmed for major repair projects are indicated below:

Funding ($ Millions)	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
	23.9	28.5	24.5	27.5	27.5	26.5

Improvement programming is as follows:

Funding ($ Millions)	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
	7.5	6.8	3.0	10.0	12.8	16.5

CHAPTER VII

TRAINING

Introduction

The Commandant established a separate Training Department on the Headquarters staff to provide more effective management of Marine Corps training as a total system. The Training Department is chartered to develop polices and programs for the training and education of regular and reserve Marines. This responsibility includes:

- Management and direction of training programs and initiatives.
- Analysis of training and publication/evaluation of collective and individual training standards for all categories of training conducted in Marine Corps units and institutions.
- Allocation and management of training resources to achieve maximum effectiveness and efficiency of training in the context of missions and standards.

The Marine Corps has adopted a training system based on the successful completion of established training standards, both collective and individual. The training standards are listed below:

- Individual training standards have been published for the infantry, tactical helicopter, observation fixed-wing, tactical fixed-wing, support crews, data systems, and transportation occupational fields and essential subject training.
- Collective training standards have been published for air command and control, ground combat, combat support, combat service support and special operations.

We require that our training programs continue to be performance and mission oriented, realistic and innovative. To accomplish this goal, the Marine Corps will participate in 195 joint, active and reserve exercises in FY-88 and 190 such exercises in FY-89. This is an increase over the 172 exercises anticipated in FY-87.

The Marine Corps has increased the number of units participating in training excercises and made the scenarios more realistic. The commanders are able to evaluate their unit's performance and the effectiveness of their contingency plans under realistic weather and terrain conditions, and threat scenarios.

MCAGCC, Twentynine Palms, California has the mission to conduct realistic training in the integration of all supporting arms and to evaluate the combined arms capabilities and readiness of all elements of Marine Air-Ground Task Forces (MAGTFs).

An exercise designated "Combined Arms Exercise" (CAX) has been developed to specifically support the accomplishment of MCAGCC's mission. The standard scenario presupposes an enemy equipped with current Soviet weapons and employing Soviet doctrine. Although the sequence and circumstances vary, standard events for a CAX are: (1) at least two command post displacements; (2) at least three attacks on objectives requiring complete combined arms fire support; (3) a night helicopterborne assault of company size; (4) development of barrier and defensive fire plans.

Ten CAXs are conducted at MCAGCC each year. The Mojave Desert training site is a realistic maneuver area that permits the use of live ordnance of all combined arms during the exercise. Lessons learned from CAXs are regularly incorporated into in doctrine, tactics and equipment development.

The Marine Corps Mountain Warfare Training Center (MCMWTC) in Bridgeport, California provides an ideal location to train for our strategic roles in northern Europe and the western Pacific. We train approximately 12,000 Marines each year in mountain warfare and cold weather operations. Nine regular battalions and one reserve battalion train at MCMWTC each year.

We also train with our Allied counterparts around the world. Each year, Marines participate in joint or combined training exercises such as Teamwork, Northern Wedding/Bold Guard, Bright Star, Big Pine, Team Spirit and Display Determination. These training exercises have been unqualified successes and strengthen the Marine Corps' combined operations capability.

The Marine Aviation Weapons and Tactics Squadron-One (MAWTS-1) at Yuma, Arizona provides standardized advanced training in all aspects of the employment of Marine aviation. MAWTS-1 conducts the semiannual Weapons and Tactics Instructor (WTI) courses which provide extensive training for 140 aircrews and aviation command and control officers. These officers return to their units and establish a cadre for unit training programs. In addition, MAWTS-1 provides training for over 3,000 wing personnel in supplemental courses each year.

Recruit training remains the fundamental element of our success and is the first step in a program designed to develop the individual Marine. Recruit training provides a series of demanding but attainable performance requirements which each recruit can identify and master. We require the highest standards of performance and conduct from our drill instructors.

These are but a few of the items and support elements which make up our training system. This chapter presents several issues of importance to the development of the Marine Corps training program.

COMPUTER-ASSISTED SYSTEMS APPROACH TO TRAINING (CASAT)

(Formerly Computer Assisted Instructional Systems Development)

DESCRIPTION: The Systems Approach to Training (SAT) process provides the framework within which Marine Corps training is analyzed, designed, developed, implemented and evaluated. The Marine Corps SAT process is based upon instructional systems development (ISD). The SAT process translates training requirements into training objectives, selects the proper training strategy, develops effective training systems and provides quality control. It is a flexible tool that ensures Marines acquire the knowledge and skills needed to accomplish the mission. The goal is to achieve the maximum return on training resource investments by improving on-the-job performance. CASAT is being developed so that Headquarters, Marine Corps can carry out its portion of the SAT process in a timely and cost-effective manner.

FUNDING PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
$ Thousands	700	280	150	150	150	150	150

WHY IS IT IMPORTANT? CASAT will facilitate the collection and processing of data from Marines in the field. It will:

- Assist in the analysis of this data by identifying which tasks are performed, by whom, where, the relative time spent in task performance, the task difficulty, the training emphasis and the commonality of tasks among military occupational specialties (MOSs) and similar units.

- Prioritize the tasks based on specified criteria.

- Facilitate the drafting and publishing of training standards by providing multiple formats and ease of update.

- Facilitate the revision and maintenance of published training standards.

- Evaluate student effectiveness in the field.

- Identify and track trends through automation, find optimal solutions and provide feedback to units and schools.

PROGRAM STATUS: CASAT will be developed for implementation at Headquarters, Marine Corps. A prototype system is currently being evaluated. The project is within budget and is scheduled for implementation in early FY-88.

DEVELOPER/MANUFACTURER: Contract for design and development has been awarded to Computer Sciences Corporation through the General Services Administration-Interagency Data Systems Facility (GSA-IDSF) located in Huntsville, Alabama.

TRAINING REQUIREMENTS AND RESOURCE MANAGEMENT SYSTEM (TRRMS)

DESCRIPTION: TRRMS will be the primary training information management system in the Marine Corps. TRRMS will consist of a centralized training information data base that will provide critical data analysis to match training requirements with training resources. TRRMS will provide better projections of training requirements and improve reporting capabilities to DOD and Congress. TRRMS is designed for use at HQMC.

FUNDING PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
$ Thousands	880	1,600	830	830	750	770	770

WHY IS IT IMPORTANT? TRRMS will provide ready access to accurate and timely data to improve manning of operational forces and improve retention in the career force. TRRMS will reduce the shortfalls in trained personnel due to inefficient use of available training resources. The reduction of unfilled school seats will result in a more balanced MOS structure. The decision-making process will improve as this detailed information is made available.

PROGRAM STATUS: Portions of TRRMS are currently operational. All major milestones are met. Full operational capability is anticipated by the end of FY-88.

DEVELOPER/MANUFACTURER: The Naval Education and Training Program Management Systems Activity (NETPMSA), under the control of the Chief of Naval Education and Training (CNET), is conducting the development, design and implementation of TRRMS.

TACTICAL DECISION MAKING AIDS

DESCRIPTION: The Marine Corps has fielded and is continuing to develop a variety of tactical decision making (TACDM) training materials and simulators to complement traditional training in the FMF and formal schools.

The Tactical Warfare Simulation, Evaluation and Analysis System-Integrated Maneuver Controller (TWSEAS-IMC) project will provide a fourth suite of equipment, currently planned for III MAF. The new software will closely simulate ground combat operations, air combat operations, combat support and combat service support operations. The TWSEAS-IMC will be capable of controlling integrated field and map exercises for FMF units or executing four simultaneous command post exercises for formal schools. A major hardware upgrade in conjunction with IMC will provide remote terminals for reserve and active units not equipped with full TWSEAS suites.

The manual war game effort has produced and fielded TACWAR, the company level system and the prototype of STEELTHRUST, the battalion level war game. The basic version of STEELTHRUST will be fielded in FY-87. Follow-on development will include amphibious variants of TACWAR and STEELTHRUST, TACWAR DESERT and occupational specialty systems for infantrymen and combat engineers.

An initial CAST is being developed to support fire support planning and coordination training in conjunction with the CAX program. The CAST will consist of a terrain model, a target designation system, and a communications system which replicates MAB tactical communication nets. Four additional CASTs will be procured for FMF locations.

FUNDING PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
$ Thousands							
TWSEAS-IMC	-	-	6,932	-	-	-	-
MANUAL WAR GAMES	820	200	300	200	-	-	-
CAST	-	1,600	-	3,102	3,186	-	-

WHY IS IT IMPORTANT? Each simulator or training package provides the commander with an alternative method of training and exercising his subordinate commanders and staff in planning, controlling and executing critical combat functions.

PROGRAM STATUS: Each of the TACDM acquisitions has an IOC between FY-87 and FY-89. The CAST delivery schedule extends to FY-92 for the various FMF sites.

TRAINING RANGE DEVELOPMENT

DESCRIPTION: The Marine Corps is continually reviewing training ranges with the goal of providing the best training possible for our Marines. We are now developing two multipurpose range complexes, one at Camp Pendleton, California and another at MCAGCC, Twentynine Palms, California. These ranges will incorporate a vast array of computer-controlled targets for infantry, armor, anti-armor and aviation units. The targets will be both stationary and moving, fully automated, self-scoring and programmable for any number of different scenarios. When completed, these ranges will provide the Marine Corps with state of the art training facilities in support of precision gunnery training for direct fire weapons. Ranges of similar function, but limited scope, are planned for Camp Lejeune, Camp Butler and Kaneohe Bay. POM initiatives for facilities to train for military operations in urban terrain (MOUT) have been submitted for Camp Lejeune. Additionally, targets, hostile fire devices and control mechanisms are being procured to support the CAXs at Twentynine Palms.

FUNDING PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
$ Thousands	7,984	1,100	15,745	3,000	-	12,500	-

WHY IS IT IMPORTANT? Force modernization has highlighted the need to incorporate modern training range development with the fielding of powerful new weapon systems. The development of ranges that maximize the training value received from the ammunition expended are of significant interest to Congress. The MOUT facility provides a unique environment for training in urban warfare.

PROGRAM STATUS: The Marine Corps' range development effort parallels a similar Army effort which is in excess of 100 million dollars. Additionally, training ranges and facilities must receive sufficient funds to meet individual and collective training standards for each weapon system. IOCs for all initiatives are reached in FY-89 and FY-90.

DEVELOPER/MANUFACTURER: The Marine Corps, in conjunction with the Army Corps of Engineers and Naval Facilities Engineering Command, San Bruno, California is developing the multipurpose range complexes.

WEAPON/EQUIPMENT SIMULATION DEVICES

DESCRIPTION: These devices provide realistic substitutes for operating actual equipment, weapons and ammunition:

- Precision Gunnery Training System (PGTS). PGTS is a device which will simulate firing and tracking DRAGON and TOW missiles. It will provide immediate feedback to the gunner and instructor on the gunner's performance and will enhance proficiency when firing live missiles.

- Small Arms Remote Targets (SARTs). SARTs are electronic remote-controlled targets for small arms.

- Remoted Engagement Target System (RETS). RETS is a controlled system of moving and stationary personnel and antiarmor targets which provides target array and gunnery effect.

- Simulated Laser Targets (SLT). SLT simulates laser-designation of a tactical target, allowing pilots using aircraft equipped with Laser Search/Track sets to realistically perform operational training.

- Moving Target Simulator (MTS). MTS will provide precision gunnery training for as many as three Stinger gunners while simulating the tactical environment of close-in air defense.

- Maintenance Trainers. These computer-based simulators provide scenarios for maintenance, problem diagnosis and emergency action procedures for motor transport, engineering and radar equipment.

FUNDING PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
$ Thousands							
PGTS	-	-	2,836	4,580	-	-	-
SARTS	5,259	-	-	-	-	-	-
RETS	-	-	1,245	-	-	-	-
SLT	3,300	-	-	-	-	-	-
MTS	1,500	-	-	-	-	-	-
Maintenance Trainers	2,522	2,600	2,015	-	-	-	-

WHY ARE THEY IMPORTANT? Weapon and equipment simulation devices allow Marines to develop speciality skills before transitioning to full task training with real equipment and live ordnance. This approach not only saves on equipment wear and ammunition, but also reduces pressure on ranges, and allows Marines to repetitively practice critical tasks quickly and safely.

PROGRAM STATUS: IOCs for each of these programs fall between FY-87 and FY-89.

INDIVIDUAL TRAINING STANDARDS (ITSs)

DESCRIPTION: ITSs are measures of job performance used to describe what an individual is supposed to do in order to perform a job successfully. Individual training standards constitute the basis for design, development, implementation and evaluation of all individual training conducted in units and institutions. In addition, training standards can be used by the commander to determine proficiency, evaluate individual training, allocate training resources and maintain quality control.

FUNDING PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
$ Thousands	5,580	3,747	3,232	3,220	1,075	1,094	1,114

WHY IS IT IMPORTANT?

- Ensures all Marines with the same MOS are taught the same skills.
- Provides means to evaluate training.
- Standardizes acceptable level of performance.
- Eliminates unnecessary training.
- Enables efficient allocation of training resources.
- Ensures that all tasks needed for satisfactory performance are identified.
- Saves time of unit and school commanders.
- Enables assignment of responsibility for training to units or institutions.
- Avoids duplication of effort by units and institutions.
- Enables validation of occupational field structure.
- Serves as a training guide/outline.

PROGRAM STATUS: Individual training standards are being developed by the Training Department. Standards are now complete or under development for 348 of the 742 MOSs. Standards for an additional 147 MOSs are expected to begin development in FY-87. The standards for the remaining MOSs will begin by FY-89.

DEVELOPER/MANUFACTURER: Eagle Technology and Allen Corporation provide contractor assistance for some occupational fields; others are done in-house.

COMBAT ENVIRONMENT SIMULATION DEVICES

DESCRIPTION: Training devices which complement the effectiveness of training by simulating live fire engagement of opposing weapon systems:

- Multiple Integrated Laser Engagement System (MILES). MILES is an eye-safe, laser-transmitting system.

- Air-Ground Engagement System (AGES). AGES is a MILES adaptation for the Cobra and Huey helicopters.

- Ground Threat Radar Simulator (GTRS). GTRS simulates enemy communication jamming and other electromagnetic interference.

FUNDING PROFILE: $ Thousands	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
MILES	5,300	-	-	-	-	-	-
AGES	-	2,002	2,115	-	-	-	-
GTRS	760	-	-	-	-	-	-

WHY ARE THEY IMPORTANT? Combat environment simulation devices add realism to training exercises and allow Marines to experience those situations which closely resemble the conditions under which they will fight. Peacetime validation of doctrine, tactics and techniques is a natural consequence of using such devices.

PROGRAM STATUS: The IOC for MILES/AGES is expected for the 1st quarter FY-88.

SCHOOL OF INFANTRY

DESCRIPTION: The objective of this initiative is to formalize the courses of instruction for infantry entry level and skill progression training by establishing a Marine Corps School of Infantry. Training will incorporate the current Infantry Training School courses and include a Squad Leader and Platoon Sergeant course. There will be two branches of the school, one at Camp Pendleton and one at Camp Lejeune. The total initiative involves the construction of an advanced infantry instructional facility and a student BEQ at each location, and the procurement of the weapons and equipment to support the instruction.

FUNDING PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
$ Thousands	-	-	2,813	19,302	3,805	4,378	4,461

WHY IS IT IMPORTANT? The infantry occupational field has no formal skill progression training. Presently, that training is provided by FMF commanders who must use their operational assets to accomplish it. A school for infantrymen will provide the Marine Corps with a method to accomplish future training requirements in the infantry community. With the increasing technological sophistication of infantry weapons, communication systems and combat support equipment, formal standardized skill progression training for infantrymen is a necessity.

PROGRAM STATUS: The Platoon Sergeant course is now a reality at Camp Pendleton using interim facilities. The first Squad Leader class is anticipated to begin in those facilities in April 1987. Interim facilities to allow similar instruction to begin at Camp Lejeune are expected by late FY-87. Permanent facilities should be complete in FY-90.

CHAPTER VIII

NAVY SUPPORT AND PROGRAMS

Introduction

This chapter contains a series of program summaries and point papers that focus on naval support requirements for amphibious power projection, an overview of the amphibious lift required to support this nation's Maritime Strategy and Marine Air-Ground Task Forces (MAGTFs) and medical support for amphibious operations.

Although the Marine Corps does not fund any portion of sealift assets, its role as an expeditionary force gives it a vested interest in the status of amphibious assault shipping. The FY 88/89-92 DG directed the DON to program the amphibious assault lift for the assualt echelons (AEs) of a MAF and MAB. This MTO will be realized by the late 1990s. The assault echelons comprise only a portion of the total MAF or MAB force structure. The remaining structure must be transported by air with the fly-in echelon (FIE) and by commercial-type shipping as part of the assault follow-on echelon (AFOE). The Navy and Marine Corps have stabilized the stated AE lift requirements specified for the MAF and MAB in order to provide a basis for the programming of a balanced amphibious ship force structure.

The current MAF(AE) lift capability is dependent upon the availability of all active and reserve amphibious ships. To attain and maintain a level of amphibious assault shipping sufficient to simultaneously lift a MAF(AE) and a MAB(AE) requires new construction as part of the 600 ship program. An outgrowth of this coordinated effort to revitalize the amphibious assault shipping force has been the development of a number of innovative proposals for improved ship-to-shore mobility that will support a wide range of operational concepts and ensure that a credible amphibious warfare capability exists through the end of this century and beyond.

Amphibious Lift

"WASP" CLASS (LHD)

DESCRIPTION: The "Wasp" class (LHD) is a multi-purpose amphibious assault ship. It will provide the Navy/Marine Corps team with our most capable ever amphibious ship. The ship's primary mission is to embark, deploy, and land elements of a Marine landing force in an assault by helicopters, landing craft, amphibious vehicles, and by combinations of these methods. The LHD class has a secondary/convertible mission for sea control.

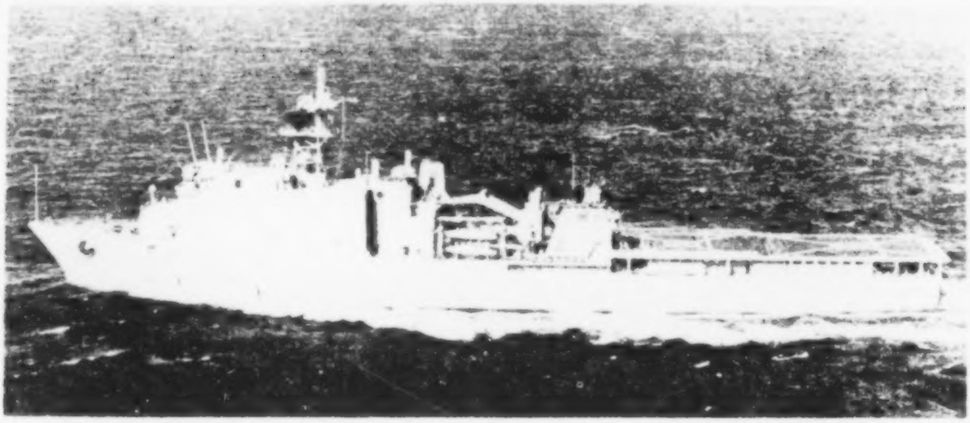
PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity	2	-	1	1	-	1	-

WHY IS IT IMPORTANT? The swift, forcible projection of our afloat Marine forces in the seizure or defense of: 1) advance naval bases for further operations, 2) land areas dominating straits and narrow seas and 3) strategic islands/ peninsulas, is of obvious importance to any naval campaign; hence, the requirement for amphibious forces. In order to be successful, however, our commanders must have not only the necessary amphibious lift but also the flexibility to land the landing force by air or surface means. The LHD class provides this flexibility first of all as an augmentation (in the short term) for the LPH class helicopter assault ships and later on as the replacement for the LPHs. The LHD will significantly increase the total lift capability by providing a flight deck for both helicopters and V/STOL aircraft and offering a well deck for both air-cushion and conventional landing craft. LHD is the linchpin to obtaining our mid-1990s lift objective.

PROGRAM STATUS: LHD 1 (USS "Wasp") is under construction. The contract for LHD 2 was awarded in October 1986. It includes options for LHD 3 and LHD 4.

DEVELOPER/MANUFACTURER: Ingalls Shipbuilding, Pascagoula, Mississippi

"WHIDBEY ISLAND" CLASS (LSD 41)



DESCRIPTION: LSD 41 will provide well deck space and have a maintenance capability for both conventional displacement landing craft and LCACs. An LSD 41 cargo variant (CV) is being designed. The LSD 41 (CV) is conceptualized as an LSD 41 basic hull, optimized for cargo.

PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity							
LSD 41	8	-	-	-	-	-	-
LSD 41 (CV)	-	-	1	-	1	1	2

WHY IS IT IMPORTANT? In 1967 there were 162 active amphibious ships. Today there are 63 total--including both active and reserve ships. The remaining three "Thomaston" (LSD 28) class ships will retire between 1987-1990. The LSD 41 construction program will replace the lost lift capacity attributed to the LSD 28 class retirements. Procurement of the LSD 41 (CV) class of ships to provide required lift for a MAF(AE) and a MAB(AE), particularly in cargo and LCAC carrying capacity, is essential.

PROGRAM STATUS: LSD 41 (USS "Whidbey Island") and LSD 42 (USS "Germantown") have been delivered. LSDs 43 through 48 are under contract/under construction. Contract design is in progress for the cargo variant; the contract award for LSD 49 is expected in April 1987.

DEVELOPER/MANUFACTURER: Lockheed Shipbuilding, Seattle, Washington
Avondale Shipyards, New Orleans, Louisiana

LANDING CRAFT AIR CUSHION (LCAC)

DESCRIPTION: The LCAC is a high-speed (40+ knots), over-the-beach, ship-to-shore amphibious landing vehicle capable of a 60-ton payload (75-ton overload). It is designed to lift all equipment organic to the MAGTF in an amphibious operation.

PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
Quantity	33	-	-	9	12	12	12

WHY IS IT IMPORTANT? This air cushion vehicle will replace current pre-WWII technology landing craft, scheduled for retirement during the late 1990s, with modern landing craft that offer the following advantages over current landing craft:

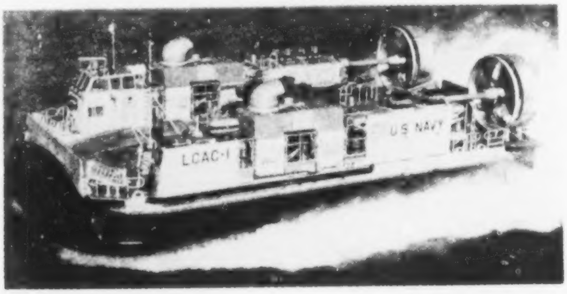
- Expose 70 percent of the world's beaches to amphibious operations vice the current 17 percent.

- Travel in excess of 40 knots, vice 9-11 knots.
- Craft characteristics provide OTH launch capability and decrease vulnerability of the force.
- Increase survivability in mined waters.
- Significantly increase build-up rate ashore, thus increasing probability of assault success.

Six LCACs are the minimum needed to provide an operational capability for a MAU. A MAB requires 25 and a MAF notionally requires 65. Since the LCAC introduces the most significant improvement to amphibious warfare since the helicopter, LCAC procurement is strongly supported by the Marine Corps.

PROGRAM STATUS: Eighteen LCACs have been delivered or are under contract (including 2 under option). Contracts for the remaining 15 FY 85-86 LCACs are expected after successful completion of Operational Test IIIB scheduled for April 1987. The first operational LCAC unit, Assault Craft Unit Five, is located at Camp Pendleton. The second unit, Assault Craft Unit Four, is currently training at Panama City, Florida and will stand up at Little Creek, Virginia, in late CY-87.

DEVELOPER/MANUFACTURER: Textron Marine Systems
Lockheed Shipbuilding



Naval Surface Fire Support (NSFS)

While evolving concepts for the conduct of the amphibious assault will exploit the capabilities of the MV-22A Osprey and LCAC to land forces in relatively unopposed areas from OTH wherever and whenever possible, circumstances may still require assaults against defended beaches and landing zones. Moreover, the landing force once ashore in the objective area must be prepared to face the type of violent counterattacks using highly mobile, mechanized forces that the projected threat espouses. This not only validates the continued requirement for NSFS to provide the responsive, close and continuous all-weather fire support required during the first 24 hours until artillery is established ashore but, given the requirement to support helicopterborne assault forces landed 15-20 nm inland, also establishes the range requirement for modern NSFS systems at 60 nm (allowing also for ship standoff distance). Reactivation of the four Iowa-Class battleships has helped, but the bottom line is that the current inventory of NSFS platforms is deficient in range and lethality due to heavy dependence on 5-inch guns and the lack of the ability to kill hard, point targets without an excessive expenditure of ammunition.

In light of the foregoing, the Marine Corps supports the following enhancements to NSFS capabilities:

- Early introduction of 16-inch improvements that include a shipboard gunfire control system for greater accuracy and an extended range submunition projectile to provide greater range and a dramatic increase in lethality.

- The 5-inch semi-active laser-guided projectile (SAL-GP), when affordable, to provide the pinpoint accuracy needed to engage hard, point targets whether mobile or stationary.

- Procurement and stockage of sufficient NSFS ammunition to support the amphibious operations of a MAF and a MAB for 60 days.

The Marine Corps also supports the conclusions of the recently completed follow-on to the 1985 Naval Gunfire Support Improvement Study directed by the Congress, which addressed future requirements by recommending:

- Evaluation of the Army's Multiple Launch Rocket System (MLRS) for use at sea.
- Development of follow-on payloads.
- Development of an 8-inch gun system to combine with the rocket system as a replacement for the 16-inch gun when the battleships are eventually retired.

NAVY SUPPORT ELEMENT (NSE)

DESCRIPTION: The NSE performs tasks to support amphibious and MPS operations in addition to those accomplished by the crews of amphibious ships. Since these units are not permanently assigned to the ships, they occupy berthing, vehicle, and cargo space designated for troops. The total lift requirement for an amphibious operation must therefore include NSE requirements as well as the MAGTF. The NSE, which will be split between the AE and the AFOE is composed of the following:

- Commander Amphibious Task Force (CATF) Staff
- Naval Beach Group
  - Beach Group
  - Amphibious Construction Battalion
  - Assault Craft Unit
- SEALs
- Explosive Ordnance Disposal (EOD) Unit
- Medical Augmentation Unit
- Mine Countermeasures Group
- Navy Mobile Construction Battalion (NMCB)
- Fleet Composite Readiness Group (FLTCORGRU)
- Search and Rescue (SAR) Unit
- Mobile Inshore Undersea Warfare (MIUW) Unit
- Navy Cargo Handling and Port Group (NAVCHAPGRU)

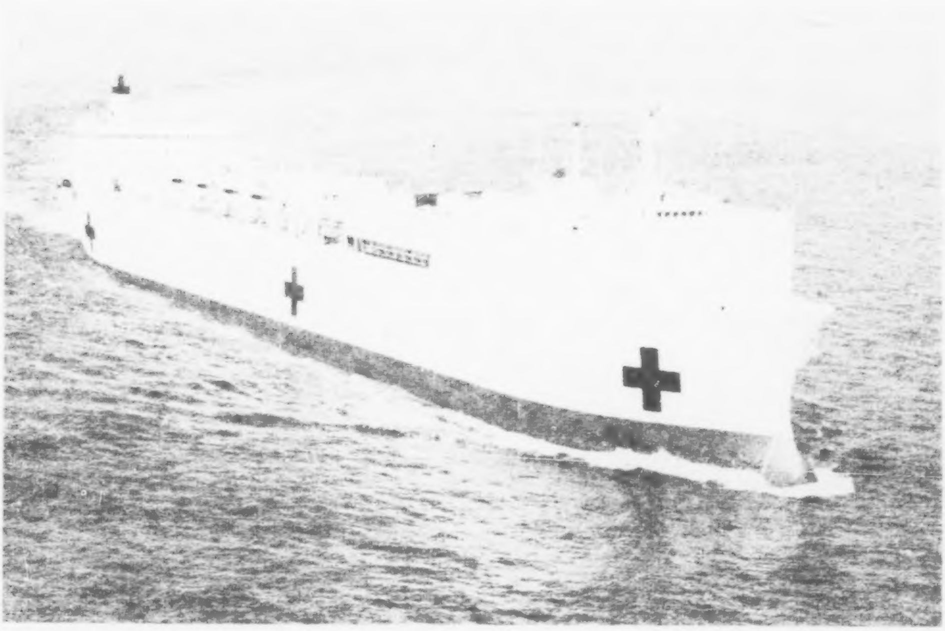
WHY IS IT IMPORTANT? The NSE is vital to the smooth off-load of the amphibious force. Made up of widely diversified units, the principal challenge involved in the NSE is the manning and training of the NAVCHAPGRU, which is instrumental in operating the off-load systems of MPS/AFOE ships, and of the Naval Beach Group Units, who operate assault craft and lighterage for off-load of AE ships and control the flow of material on the beach to the high water mark.

PROGRAM STATUS: The Marine Corps supports the ability to simultaneously deploy two MPS MABs and two amphibious task forces. The Navy is programming to meet this goal using a preponderance of reserve forces in the NAVCHAPGRU and amphibious construction battalion.

Medical Support

The timely provision of adequate wartime medical support to the FMF requires a wide range of expeditionary medical facilities. These facilities must be maintained at a high level of readiness in terms of trained manpower and logistics preparations. As a force-in-readiness, the FMF's mission to respond to global contingencies dictates that medical support facilities must be mobile and capable of rapid expansion with MAGTF buildup. Medical support assets should be sufficient overall to support three active MAFs while retaining the capability to be sized and packaged for employment with task organized MAGTFs. The structure of medical support must include rapidly deployable afloat facilities capable of providing support immediately upon arrival in the AOA.

Each MAF must have the assets to care for 20,000 casualities. Accordingly, state of the art medical equipment has been added to the inventories, and medical personnel manning levels have been programmed to improve readiness. The first of two hospital ships, the USNS "Mercy", has been delivered and will depart for the Philippines on a humanitarian mission in March 1987. Subsequently, she will enter the Reserve Fleet on the west coast in a 5 day recall status (ROS-5). The second ship, USNS "Comfort", will become operational in late 1987. She will also be maintained in ROS-5 status but will be located on the east coast. Both these ships have 1,000 beds and 12 operating rooms. Finally, by 1991, the Navy will reach the programmed goal of 11,250 hospital beds in 13 combat zone (CBTZ) fleet hospitals and 8 communication zone (COMMZ) fleet hospitals. Medical support fleet hospitals as programmed represent a significant improvement over previous capabilities.



NAVY FLEET HOSPITALS

DESCRIPTION: Fleet hospitals are modular, rapidly erectable, relocatable medical facilities for treatment of both Navy and Marine Corps wounded. This Navy program provides both CBTZ and COMMZ facilities of varying sizes for a balance of mobility, flexibility and levels of care. Fleet hospitals will receive patients from amphibious task force ships, directly from medical units organic to Marine forces and from hospital ships. Fleet hospitals can be staged in CONUS or prepositioned either afloat or overseas in advance of hostilities. The total program calls for 21 hospitals. The first 2,500 beds (four 500-bed and two 250-bed CBTZ hospitals) will be delivered during FY-87.

PROCUREMENT PROFILE:	PRIOR	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92
	(3)CBTZ 250-bed	(3)COMMZ 500-bed		(1)COMMZ 500-bed	(2)COMMZ 1,000-bed	(1)COMMZ 1,000-bed	
	(9)CBTZ 500-bed						
	(1)COMMZ 500-bed	(1)CBTZ 500-bed					
	(13)5,750 beds	(4)2,000 beds		(1)500 beds	(2)2,000 beds	(1)1,000 beds	

TOTAL 11,250 BEDS

WHY IS IT IMPORTANT? Rapidly deployable fleet hospitals will provide timely treatment in-theater to save lives, reduce disease, and maximize returns to duty. Like hospital ships and medical battalions, they are an integral part of the naval theater medical support structure and continuum of care. All elements of the continuum are needed to sustain combat operations.

PROGRAM STATUS: This program is on schedule.

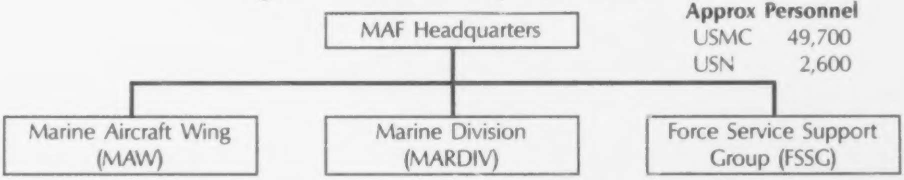
APPENDIX A

Marine Corps Tactical Force Organization

FMFs are comprised of ground, air, and CSS units that are routinely task organized into Marine Corps Air-Ground Task Forces (MAGTFs) for operations. Marine Corps doctrine provides that FMFs will be employed as integrated air-ground task forces tailored to accomplish specific missions. Regardless of the size of the MAGTF, it will include four major components: CE, GCE, ACE and CSSE.

There are three basic types of MAGTFs. The MAF is the largest of the MAGTFs, and is normally built around a division/wing team. However, it may range in size from less than a complete division/wing team up to several divisions and aircraft wings, together with an appropriate combat service support organization. The MAF is commanded by either a major general or a lieutenant general, depending on its size and mission. It is capable of conducting the full range of amphibious operations and sustained operations ashore, and can be tailored for a wide variety of combat missions in any geographic environment. A MAF is deployed in three stages. The first and largest is the AE. With the arrival of the AFOE and the FIE the MAF, consisting of over 52,000 Marines and Sailors, is complete. A notional task organization for the MAF is displayed in Figure A-1. 1/*

Figure A-1: Marine Amphibious Force


MAF Headquarters
Marine Aircraft Wing (MAW)
Marine Division (MARDIV)
Force Service Support Group (FSSG)

Approx Personnel
USMC 49,700
USN 2,600

Aircraft/Launchers 2/*

40 AV-8B or 38 A-4M
48 F/A-18 or 48 F-4
20 A-6
8 EA-6
8 RF-4B
9 TA-4/OA-4
12 KC-130
12 OV-10
16 CH-53E
32 CH-53D
60 CH-46
24 UH-1
24 AH-1
24 Hawk Launchers
75 Stinger Teams

Major Ground Combat Equipment

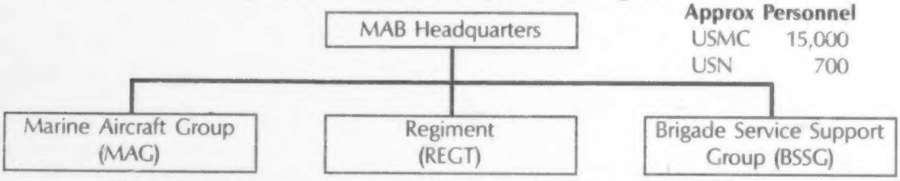
70 Tanks
72 81mm Mortars
288 Dragon Trackers
144 TOW Launchers
208 AAV
147 LAV
90 155mm HOW
18 155mm HOW (SP)
12 8" HOW (SP)
81 60mm Mortars
435 50 Cal MG
601 M-60 MG
345 MK-19 40mm Grenade Launchers

1/* Actual task organization formed to accomplish specific missions may vary from the organization shown.

2/* The Aviation Force shown equals approximately 1/3 of the total active aviation force assets. This force is not ideal (for example: 72 attack helicopters are the recognized minimum to properly support a MAF).

The MAB is the second largest type of MAGTF and is a task organization which is normally built around a reinforced infantry regiment and a composite Marine aircraft group. It is normally commanded by a brigadier general and is capable of conducting all types of amphibious operations. During potential crisis situations, a MAB may be forward deployed afloat for an extended period to provide immediate response and may serve as the precursor of a larger force. Under these conditions, MAB combat operations ashore may be supported from the sea base facilities of the Navy's amphibious ships. The MAB is deployed in three stages like a MAF. Most of the combat capability and Marine personnel are included in the AE. A notional task organization for a MAB is displayed in Figure A-2. 1/*

Figure A-2: Marine Amphibious Brigade


MAB Headquarters
Marine Aircraft Group (MAG)
Regiment (REGT)
Brigade Service Support Group (BSSG)

Approx Personnel

USMC	15,000
USN	700

Aircraft/Launchers 2/*

20	AV-8B	or	19	A-4M
24	F/A-18	or	24	F-4
10	A-6		8	CH-53E
4	EA-6		20	CH-53D
4	RF-4B		48	CH-46
5	OA-4M		12	UH-1
6	KC-130		12	AH-1
6	OV-10		6	Hawk Launchers
			15	Stinger Teams

Major Ground Combat Equipment

17	Tanks	24	155mm HOW (T)
24	81mm Mortars	6	155mm HOW (SP)
96	Dragon Trackers	6	8" HOW (SP)
48	TOW Launchers	27	60mm Mortars
47	AAV	138	50 Cal MG
36	LAV	255	M-60 MG
		114	MK-19 40mm Grenade Launchers

1/* Actual task organization formed to accomplish specific missions may vary from the organization shown.

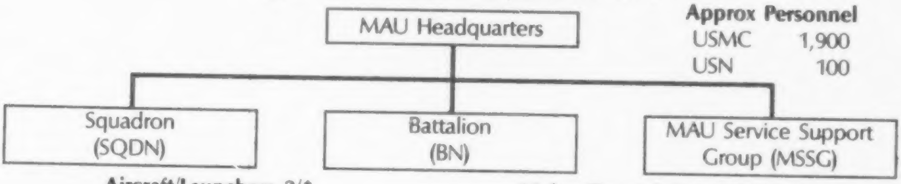
2/* The Aviation Force shown, when added to an MPS Force List, equals approximately 1/3 of the total active aviation force assets. This force is not ideal (for example: 24 attack helicopters are the recognized minimum to properly support a MAB).

The MAU is a task organization which is normally built around a reinforced infantry battalion and a composite helicopter squadron. It is normally commanded by a colonel and employed to fulfill routine, forward-afloat deployment requirements. The MAU provides an immediate reaction capability to crisis situations and is capable of relatively limited combat operations. Because of its comparatively limited sustainability, it is not envisioned that a MAU will routinely conduct amphibious assaults. When committed ashore, a MAU is normally supported from its sea base. A MAU is considered to be the forward afloat deployed element of a larger landing force, which would be constituted as required from CONUS or forward based combat ready FMFs. A notional task organization for a MAU is displayed in Figure A-3. 1/*

The MAGTF is a tailored, combined arms organization. Separate employment of MAGTF elements under another command structure is contrary to Marine Corps policy. To do so is to fragment combat power, cause tactical and logistical supportability to become questionable, and to reduce overall combat effectiveness.

MAGTFs organized for amphibious operations deploy as the landing force aboard amphibious task force shipping. MAGTFs are also deployed for rapid response or reinforcing roles by means of tactical or strategic air or sealift. MAGTFs may be formed and deployed for combat, contingency deployments, and training exercises, and may be committed to combat from contingency deployments.

Figure A-3: Marine Amphibious Unit



Approx Personnel

USMC	1,900
USN	100

Aircraft/Launchers 2/*

12 CH-46
4 CH-53D/E
4 AH-1
2 UH-1
5 Stinger Teams

Major Ground Combat Equipment

5 Tanks
8 81mm Mortars
32 Dragon Trackers
8 TOW Launchers
12 AAV
8 155mm HOW
9 60mm Mortars
20 50 Cal MG
60 M-60 MG
26 MK-19 40mm Grenade Launchers

1/* Actual task organization formed to accomplish specific missions may vary from the organization shown.

2/* The ACE could be reinforced by 1 VMA DET (6 AV-8) as the tactical situation dictates.

APPENDIX B

Glossary

AAV	ASSAULT AMPHIBIOUS VEHICLE
AAWS-M	ADVANCED ANTITANK WEAPON SYSTEM-MEDIUM
ABFC	ADVANCE BASE FUNCTIONAL COMPONENT
ACE	AVIATION COMBAT ELEMENT
ACM	AIR COMBAT MANEUVERING
ACMC	ASSISTANT COMMANDANT OF THE MARINE CORPS
ACMCC	ACMC COMMITTEE
ACP	AIRBORNE COLLECTION PLATFORM
ADAM	AREA DENIAL ARTILLERY MUNITION
ADP	AUTOMATED DATA PROCESSING
ADSU	AIR DELIVERED STORAGE UNIT
AE	ASSAULT ECHELON
AFOE	ASSAULT FOLLOW-ON ECHELON
AFQT	ARMED FORCES QUALIFICATION TEST
AGES	AIR GROUND ENGAGEMENT SYSTEM
AIS	AUTOMATED INFORMATION SYSTEM
AMASS	ADVANCED MARINE AIRBORNE SIGNALS INTELLIGENCE SYSTEM
ANGLICO	AIR/NAVAL GUNFIRE LIAISON COMPANY
ANVIS	AVIATOR'S NIGHT VISION IMAGING SYSTEM
AOA	AMPHIBIOUS OBJECTIVE AREA
APFSDS-T	ARMOR PIERCING FIRE STABILIZED DISCARDING SABOT-TRACER
APN	AIRCRAFT PROCUREMENT, NAVY
APPN	APPROPRIATION
APTS	ANALOG PRINTED TEST SET
ARBS	ANGLE RATE BOMBING SYSTEM
ARMS	AUTOMATED RECRUIT MANAGEMENT SYSTEM
ASIP	ALL SOURCE IMAGERY PROCESSOR
ASW	ANTISUBMARINE WARFARE
ATACC	ADVANCED TACTICAL AIR COMMAND CENTRAL
ATD	ADDITIONAL TEMPORARY DUTY
AVLB	ARMORED VEHICLE LAUNCHED BRIDGE
AVN	AVIATION
BCS	BATTERY COMPUTER SYSTEM
BEQ	BACHELOR ENLISTED QUARTERS
BLT	BATTALION LANDING TEAM
C^4	COMMAND, CONTROL, COMMUNICATIONS AND COMPUTER SYSTEMS
CAEMS	COMPUTER AIDED EMBARKATION MANAGEMENT SYSTEM
CAL	CALIBER
CAMPS	COMPUTER-ASSISTED MISSION PLANNING SYSTEM
CASAT	COMPUTER-ASSISTED SYSTEMS APPROACH TO TRAINING
CAST	COMBINED ARMS STAFF TRAINER
CATF	COMMANDER AMPHIBIOUS TASK FORCE
CAX	COMBINED ARMS EXERCISE
CBTZ	COMBAT ZONE
CCO	COMMUNICATIONS COLLECTION OUTSTATION
CCS	COUNTERINTELLIGENCE COMMUNICATIONS SYSTEM
CCU	COCKPIT CONTROL UNIT
CE	COMMAND ELEMENT
CEP	CIRCULAR ERROR PROBABLE
CG	COMMANDING GENERAL
CHAP	CONTAINER HANDLER, ALL PURPOSE
CHG PROP WB	CHARGE PROPELLENT WHITE BAG
CI	COUNTERINTELLIGENCE
CIEP	COUNTERINTELLIGENCE EQUIPMENT PROGRAM
CINC	COMMANDER-IN-CHIEF
CINCLANTFLT	COMMANDER-IN-CHIEF ATLANTIC FLEET
CINCPACFLT	COMMANDER-IN-CHIEF PACIFIC FLEET
CI&SE	COUNTERINTELLIGENCE AND SECURITY EQUIPMENT
CIT	COUNTERINTELLIGENCE TEAM
CMC	COMMANDANT OF THE MARINE CORPS
CNET	CHIEF OF NAVAL EDUCATION AND TRAINING
COMINT	COMMUNICATIONS INTELLIGENCE
COMMZ	COMMUNICATION ZONE
COMSEC	COMMUNICATIONS SECURITY

CONUS	CONTINENTAL UNITED STATES
CP	COMMAND POST
CRAF	CIVIL RESERVE AIR FLEET
CSP	CONTINGENCY SUPPORT PACKAGE
CSSE	COMBAT SERVICE SUPPORT ELEMENT
CUDIX	COMMON USER DIGITAL EXCHANGE
CV	CARGO VARIANT
CVBG	CARRIER BATTLE GROUP
CY	CALENDAR YEAR
DAMA	DEMAND ASSIGNED MULTIPLE ACCESS
DASC	DIRECT AIR SUPPORT CENTER
DCS	DEFENSE COMMUNICATIONS SYSTEM
DC/S	DEPUTY CHIEF OF STAFF
DCT	DIGITAL COMMUNICATIONS TERMINAL
DECM	DEFENSIVE ELECTRONIC COUNTER MEASURES
DEP	DELAYED ENTRY PROGRAM
DF	DIRECTION FINDING
DG	DEFENSE GUIDANCE
DI	DRILL INSTRUCTOR
DMA	DEPOT MAINTENANCE ACTIVITY
DOD	DEPARTMENT OF DEFENSE
DON	DEPARTMENT OF THE NAVY
DT	DEVELOPMENTAL TEST
DTDMA	DISTRIBUTED TIME DIVISION MULTIPLE ACCESS
ECCM	ELECTRONIC COUNTER-COUNTERMEASURES
ECM	ELECTRONIC COUNTERMEASURES
ECO	ELINT COLLECTION OUTSTATION
ELINT	ELECTRONIC INTELLIGENCE
EMC	ELECTRONIC MAINTENANCE COMPLEX
EO	ELECTRO-OPTICAL
EOD	EXPLOSIVE ORDNANCE DISPOSAL
ESS	ELECTRONIC INTELLIGENCE (ELINT) SUPPORT SYSTEM
EUCE	END USER COMPUTING EQUIPMENT
EW	ELECTRONIC WARFARE
EWSM	ELECTRONIC WARFARE SUPPORT MEASURES
FAAD	FORWARD AREA AIR DEFENSE
FDC	FIRE DIRECTION CENTER
FHN&MC	FAMILY HOUSING, NAVY AND MARINE CORPS
FIE	FLY-IN ECHELON
FLIR	FORWARD LOOKING INFRARED
FLS	FIELD LOGISTICS SYSTEM
FLTCORGRU	FLEET COMPOSITE READINESS GROUP
FLTSAT	FLEET SATELLITE
FM	FREQUENCY MODULATION
FMF	FLEET MARINE FORCE
FMFLANT	FLEET MARINE FORCE, ATLANTIC
FMFPAC	FLEET MARINE FORCE, PACIFIC
FSD	FULL SCALE DEVELOPMENT
FSED	FULL SCALE ENGINEERING DEVELOPMENT
FSSG	FORCE SERVICE SUPPORT GROUP
FTS	FULL-TIME SUPPORT
FY	FISCAL YEAR
FYDP	FIVE YEAR DEFENSE PROGRAM
GCE	GROUND COMBAT ELEMENT
GCS	GROUND CONTROL STATION
GP	GENERAL PURPOSE
GPETE	GENERAL PURPOSE ELECTRONIC TEST EQUIPMENT
GPH	GALLONS PER HOUR
GPS	GLOBAL POSITIONING SYSTEM
GSA-IDSF	GENERAL SERVICES ADMINISTRATION-INTERAGENCY DATA SYSTEMS FACILITY
GSRS	GENERAL SUPPORT ROCKET SYSTEM
GTRS	GROUND THREAT RADAR SIMULATOR
HARM	HOMING ANTIRADIATION MISSILE
HAW	HEAVY ANTIARMOR WEAPON
HEAA	HIGH EXPLOSIVE ANTIARMOR
HEAT	HIGH EXPLOSIVE ANTITANK
HEAT-MP-T	HEAT-MULTI-PURPOSE-TRACER

HEDP	HIGH EXPLOSIVE, DUAL PURPOSE
HEMTT	HEAVY EXPANDED MOBILITY TACTICAL TRUCK
HESU	HAND EMPLACED STORAGE UNIT
HET	HEAVY EQUIPMENT TRANSPORTER
HFCC	HIGH FREQUENCY COMMUNICATIONS CENTRAL
HMMWV	HIGH MOBILITY MULTIPURPOSE WHEELED VEHICLE
HOW	HOWITZER
HP	HORSEPOWER
HQ	HAVE QUICK
HQMC	HEADQUARTERS MARINE CORPS
HUMINT	HUMAN INTELLIGENCE
IAC	INTELLIGENCE ANALYSIS CENTER
ICM	IMPROVED CONVENTIONAL MUNITIONS
IDASC	IMPROVED DIRECT AIR SUPPORT CENTRAL
IFF	IDENTIFICATION FRIEND OR FOE
I&L	INSTALLATIONS AND LOGISTICS
ILLUM	ILLUMINATION
IMA	INTERMEDIATE MAINTENANCE ACTIVITY
IMC	INTEGRATED MANEUVER CONTROLLER
IMINT	IMAGERY INTELLIGENCE
IMS	INSTRUCTIONAL MANAGEMENT SYSTEM
INTEL	INTELLIGENCE
IOC	INITIAL OPERATING CAPABILITY
IR	INFRARED
IRR	INDIVIDUAL READY RESERVE
ISD	INSTRUCTIONAL SYSTEMS DEVELOPMENT
ISIS	INTEGRATED SIGNALS INTELLIGENCE SYSTEM
ISO	INTERNATIONAL STANDARDIZATION ORGANIZATION
ISP	INFORMATION STRATEGY PLAN
ITS	INDIVIDUAL TRAINING STANDARD
IU	INTERROGATION UNIT
JCS	JOINT CHIEFS OF STAFF
JINTACCS	JOINT INTEROPERABILITY TACTICAL COMMAND AND CONTROL SYSTEM
JTIDS	JOINT TACTICAL INFORMATION DISTRIBUTION SYSTEM
JUMPS/MMS	JOINT UNIFORM MILITARY PAY SYSTEM/MANPOWER MANAGEMENT SYSTEM
KE	KINETIC ENERGY
KHZ	KILOHERTZ
LAAD	LOW ALTITUDE AIR DEFENSE
LAAM	LIGHT ANTIAIRCRAFT MISSILE
LAW	LIGHT ANTIARMOR WEAPON
LACH	LIGHTWEIGHT AMPHIBIOUS CONTAINER HANDLER
LAV	LIGHT ARMORED VEHICLE
LEWDD	LIGHTWEIGHT EARLY WARNING DETECTION DEVICE
LCAC	LANDING CRAFT AIR CUSHION
LEASAT	LEASED SATELLITE
LHD	AMPHIBIOUS ASSAULT SHIP (MULTI-PURPOSE)
LLI	LONG LEAD ITEM
LOB	LINE-OF-BEARING
LSD	DOCK LANDING SHIP
LVS	LOGISTICS VEHICLE SYSTEM
LWCMS	LIGHT WEIGHT COMPANY MORTAR SYSTEM
MAB	MARINE AMPHIBIOUS BRIGADE
MAF	MARINE AMPHIBIOUS FORCE
MAG	MARINE AIRCRAFT GROUP
MAGIS	MARINE AIR-GROUND INTELLIGENCE SYSTEM
MAGTF	MARINE AIR-GROUND TASK FORCE
MARDIV	MARINE DIVISION
MASC	MAGTF AUTOMATED SERVICES CENTER
MAU	MARINE AMPHIBIOUS UNIT
MAU(SOC)	MARINE AMPBHIBIOUS UNIT (SPECIAL OPERATIONS CAPABLE)
MAW	MARINE AIR WING
MAWTS-1	MARINE AVIATION WEAPONS AND TACTICS SQUADRON-ONE
MBT	MAIN BATTLE TANK
MCAGCC	MARINE CORPS AIR-GROUND COMBAT CENTER (TWENTY-NINE PALMS, CA)
MCAS	MARINE CORPS AIR STATION

MCATES	MARINE CORPS AUTOMATED TEST EQUIPMENT SYSTEM
MCB	MARINE CORPS BASE
MCCDPA	MARINE CORPS CENTRAL DESIGN AND PROGRAMMING ACTIVITY
MCDEC	MARINE CORPS DEVELOPMENT AND EDUCATION COMMAND
MCESS	MARINE CORPS EXPEDITIONARY SHELTER SYSTEM
MCLB	MARINE CORPS LOGISTICS BASE
MCMWTC	MARINE CORPS MOUNTAIN WARFARE TRAINING CENTER (PICKEL MEADOWS, CA)
MCON	MILITARY CONSTRUCTION,
MCNR	MILITARY CONSTRUCTION, NAVY RESERVE
MCSF	MARINE CORPS STOCK FUND
MEC	MINIMUM ESSENTIAL CAPABILITY
MEWSS	MOBILE ELECTRONIC WARFARE SUPPORT SYSTEM
MG	MACHINE GUN
MGB	MEDIUM GIRDER BRIDGE
MHZ	MEGAHERTZ
MIFASS	MARINE INTEGRATED FIRE AND AIR SUPPORT SYSTEM
MILES	MULTIPLE INTEGRATED LASER ENGAGEMENT SYSTEM
MIUW	MOBILE INSHORE UNDERSEA WARFARE
MLRP	MARINE CORPS LONG RANGE PLAN
MM	MILLIMETER
MMROP	MARINE CORPS MID-RANGE OBJECTIVES PLAN
MORDT	MOBILIZATION OPERATIONAL READINESS DEPLOYMENT TEST
MOS	MILITARY OCCUPATIONAL SPECIALITY
MOUT	MILITARY OPERATIONS IN URBAN TERRAIN
MPF	MARITIME PREPOSITIONING FORCE
MPMC	MILITARY PERSONNEL, MARINE CORPS
MPN	MILITARY PERSONNEL, NAVY
MPR	MANPOWER
MPS	MARITIME PREPOSITIONING SHIPS
MSC	MILITARY SEALIFT COMMAND
MTO	MID-TERM OBJECTIVE
MTS	MOVING TARGET SIMULATOR
MU	MEMORY UNIT
MULE	MODULAR UNIVERSAL LASER EQUIPMENT
NATO	NORTH ATLANTIC TREATY ORGANIZATION
NAVCOMPT	COMPTROLLER OF THE NAVY
NAVCHAPGRU	NAVY CARGO HANDLING AND PORT GROUP
NAVMACS	NAVAL MODULAR AUTOMATED COMMUNICATIONS SUB-SYSTEM
NBC	NUCLEAR, BIOLOGICAL AND CHEMICAL
NCA	NATIONAL COMMAND AUTHORITY
NDI	NON-DEVELOPMENTAL ITEM
NDRF	NATIONAL DEFENSE RESERVE FLEET
NETPMSA	NAVAL EDUCATION AND TRAINING PROGRAM MANAGEMENT SYSTEMS ACTIVITY
NM	NAUTICAL MILE
NMCB	NAVY MOBILE CONSTRUCTION BATTALION
NOSC	NAVAL OCEAN SYSTEMS CENTER
NSA	NATIONAL SECURITY AGENCY
NSE	NAVY SUPPORT ELEMENT
NSF	NAVY STOCK FUND
NSFS	NAVAL SURFACE FIRE SUPPORT
NTPF	NEAR TERM PREPOSITIONING FORCE
NTS	NAVAL TELECOMMUNICATIONS SYSTEM
O&MMC	OPERATION AND MAINTENANCE, MARINE CORPS
O&MMCR	OPERATION AND MAINTENANCE, MARINE CORPS RESERVE
O&MN	OPERATION AND MAINTENANCE, NAVY
O&MNR	OPERATION AND MAINTENANCE, NAVY RESERVE
OPN	OTHER PROCUREMENT, NAVY
OSD	OFFICE OF THE SECRETARY OF DEFENSE
OT	OPERATIONAL TESTING
OT&E	OPERATIONAL TEST AND EVALUATION
OTH	OVER THE HORIZON
PAA	PROGRAMMED AIRCRAFT AUTHORIZATION
PALCON	PALLET CONTAINER
PCG	PROGRAM COORDINATION GROUP
PCS	PORTABLE CONTROL STATION
PEI	PRINCIPAL END ITEM
PEO	PRINCIPAL EXECUTIVE OFFICER
PGTS	PRECISION GUNNERY TRAINING SYSTEM

PIP	PRODUCT IMPROVEMENT PROGRAM
PIU	PROCESSOR INTERFACE UNIT
PLRS	POSITION LOCATION REPORTING SYSTEM
PMC	PROCUREMENT, MARINE CORPS
POL	PETROLEUM, OIL AND LUBRICANTS
POM	PROGRAM OBJECTIVE MEMORANDUM
PPBS	PLANNING, PROGRAMMING AND BUDGETING SYSTEM
PP&O	PLANS, POLICIES AND OPERATIONS
PSI	POUNDS PER SQUARE INCH
PWG	POM WORKING GROUP
QOL	QUALITY OF LIFE
QUADCON	QUADRUPLE CONTAINER
R&D	RESEARCH AND DEVELOPMENT
RAP	ROCKET ASSISTED PROJECTILE
RAAM	REMOTE ANTIARMOR MINE
RAP	ROCKET ASSISTED PROJECTILE
RASC	REGIONAL AUTOMATED SERVICE CENTER
RB	RED BAG
R/DF	REPRODUCTION/DISTRIBUTION FACILITY
RDT&EN	RESEARCH, DEVELOPMENT, TEST AND EVALUATION NAVY
RETS	REMOTE ENGAGEMENT TARGET SYSTEM
RF	RADIO FREQUENCY
RHA	ROLLED HOMOGENEOUS ARMOR
RKT	ROCKET
RLT	REGIMENTAL LANDING TEAM
RO/RO	ROLL-ON/ROLL-OFF
ROWPU	REVERSE OSMOSIS WATER PURIFICATION UNIT
RPMC	RESERVE PERSONNEL, MARINE CORPS
RPN	RESERVE PERSONNEL, NAVY
RPPS	RETIRED PAY PERSONNEL SYSTEMS
RPV	REMOTELY PILOTED VEHICLE
RRF	READY RESERVE FLEET
RTCH	ROUGH TERRAIN CONTAINER HANDLER
RU	RECOVERY UNIT
SAAS	STAND ALONE ANALYSIS SYSTEM
SAL-GP	SEMIACTIVE, LASER-GUIDED PROJECTILE
SAR	SEARCH AND RESCUE
SARTS	SMALL ARMS REMOTE TARGETS
SAT	SYSTEMS APPROACH TO TRAINING
SAU	SELECTED AUGMENTATION UNIT
SAW	SQUAD AUTOMATIC WEAPON
SCN	SHIPBUILDING AND CONVERSION, NAVY
SE	SUPPORTING ESTABLISHMENT
SEAL	SEA-AIR-LAND
SECNAV	SECRETARY OF THE NAVY
SEE	SMALL EMPLOYMENT EXCAVATOR
SHF	SUPER HIGH FREQUENCY
SIGINT	SIGNALS INTELLIGENCE
SINCGARS	SINGLE CHANNEL GROUND AND AIRBORNE RADIO SYSTEM
SIXCONS	FUEL/WATER STORAGE AND PUMP MODULES
SLAR	SIDE LOOKING AIRBORNE RADAR
SLEP	SERVICE LIFE EXTENSION PROGRAM
SLOC	SEA LINES OF COMMUNICATION
SLT	SIMULATED LASER TARGETS
SMAW	SHOULDER-LAUNCHED MULTIPURPOSE ASSAULT WEAPON
SMCR	SELECTED MARINE CORPS RESERVE
SMK	SMOKE
SP	SELF PROPELLED
SRB	SELECTIVE REENLISTMENT BONUS
SRP	SEALIFT READINESS PROGRAM
STA	SURVEILLANCE AND TARGET ACQUISITION
TACAIR	TACTICAL AIR
TACC	TACTICAL AIR COMMAND CENTER
TACDM	TACTICAL DECISION MAKING
TAOM	TACTICAL AIR OPERATIONS MODULE
TADIL-J	TACTICAL DIGITAL INFORMATION LINK-J
TAVB	AVIATION LOGISTICS SUPPORT SHIP

TBD	TO BE DETERMINED
TCAC	TECHNICAL CONTROL AND ANALYSIS CENTER
TCC	TACTICAL COMMUNICATIONS CENTER
TCO	TACTICAL COMBAT OPERATIONS
TDAR	TACTICAL DEFENSE ALERT RADAR
TDMA	TIME DIVISION MULTIPLE ACCESS
T/E	TABLE OF EQUIPMENT
TENCAP	TACTICAL EXPLOITATION OF NATIONAL CAPABILITES
TERPES	TACTICAL ELECTRONIC RECONNAISSANCE PROCESSING AND EVALUATION SYSTEM
TFS	TACTICAL FUEL SYSTEM
TIMS	TRAINING INFORMATION MANAGEMENT SYSTEM
TLB	TRAILER LAUNCHED BRIDGE
TOA	TOTAL OBLIGATIONAL AUTHORITY
TPCS	TEAM PORTABLE COMMUNICATIONS INTELLIGENCE SYSTEM
TPCSDS-T	TARGET PRACTICE CONE STABILIZED DISCARDING SABOT-TRACER
TPS	TEST PROGRAM SET
TP-T	TARGET PRACTICE-TRACER
TPSDS	TEST PROGRAM SET DEVELOPMENT SYSTEM
TRI-TAC	JOINT TACTICAL COMMUNICATIONS OFFICE
TRNG	TRAINING
TRRMS	TRAINING REQUIREMENTS AND RESOURCE MANAGEMENT SYSTEM
TRSS	TACTICAL REMOTE SENSOR SYSTEM
TSCM	TECHNICAL SURVEILLANCE COUNTERMEASURES
TWSEAS	TACTICAL WARFARE SIMULATION, EVALUATION AND ANALYSIS SYSTEM
TWSEAS-IMC	TWSEAS - INTEGRATED MANEUVER CONTROLLER
UDP	UNIT DEPLOYMENT PROGRAM
UHF	ULTRA HIGH FREQUENCY
ULCS	UNIT LEVEL CIRCUIT SWITCH
ULS	UNIT LEVEL SWITCH
USA	UNITED STATES ARMY
VEAP	VETERAN'S EDUCATION ASSISTANCE PROGRAM
VHF	VERY HIGH FREQUENCY
VMADET	FIXED WING MARINE ATTACK DETACHMENT
VMFT-401	MARINE FIGHTER TRAINING SQUADRON-401
V/STOL	VERTICAL SHORT TAKE OFF AND LANDING
WB	WHITE BAG
WP	WHITE PHOSPHOROUS
WPN	WEAPONS PROCUREMENT, NAVY
WTI	WEAPONS AND TACTICS INSTRUCTOR

APPENDIX C

Current Capabilities

These current capability programs were described in the 1985 Concepts and Issues in detail. As the weapons and systems are substantially fielded, this current edition does not include detailed descriptions.

GROUND COMBAT
- Shoulder-Launched Multipurpose Assault Weapon (SMAW)
- Light Armored Vehicle (LAV)
- Landing Vehicle Tracked LVT7A1
- Modular Universal Laser Equipment (MULE)
- M60E3 Lightweight 7.62mm Machine Gun
- M16A2 Rifle
- Battery Computer System (BCS)
- Armored Vehicle Launched Bridge (AVLB)
- M-198 155mm Howitzer

AVIATION
- GAU 12/U 25mm Gun
- GATOR
- AN/TPS-59 Radar
- Contingency Support Package (CSP)
- 10 day Fly-in "O" Level Support Packages

CSS
- Marine Corps Expeditionary Shelter System (MCESS)
- Intermediate Size Containers (Inserts, Palcons, and Quadcons)
- Medium Tactical Truck
- 70-ton Heavy Equipment Transporter
- Crash/Fire/Rescue Vehicle (C/F/R)
- Lightweight Amphibious Container Handler (LACH)
- Rough Terrain Container Handler (RTCH)
- Wet and Dry Gap Bridging
- Tactical Steam Cleaner
- Tactical Fuel System
- Small Employment Excavator (SEE)

C^4
- Central Processing Unit (CPU) Augmentation Program
- Automated Data Processing Equipment for the Supporting Establishment (ADPE-SE)

INTEL
- Intelligence Analysis Center (IAC)
- Forward Pass
- Team Portable Direction Finder (TPDF) PIP

NAVY
- Strategic Sealift Requirements
- Maritime Prepositioning Ship
- Aviation Logistics Support Ship (TAVB)
- Advance Base Functional Components (ABFC)

APPENDIX D

Distribution

CG FMFPAC	20
CG FMFLANT	20
CG FMFEUR Designate	10
CG 1ST MARDIV	30
CG 2D MARDIV	30
CG 3D MARDIV	30
CG 4TH MARDIV	30
CG 1ST MAW	30
CG 2D MAW	30
CG 3D MAW	30
CG 4TH MAW	30
CG 1ST FSSG	30
CG 2D FSSG	30
CG 3D FSSG	30
CG 4TH FSSG	30
CG MCLB, Albany	10
CG MCLB, Barstow	10
CG 1ST MAB	10
CG 2D MAB	10
CG 4TH MAB	10
CG 5TH MAB	10
CG 6TH MAB	10
CG 7TH MAB	10
CG 9TH MAB	10
CG MCAGCC	10
CG I MAF	10
CG II MAF	10
CG III MAF	10
CG MCB CAMP PENDLETON	20
CG MCB CAMP LEJEUNE	20
CG MCDEC	200
MCOTEA	10
MCTSSA	10
MCFC	10
NROTC Schools	59
District Directors	6
Recruiting Stations	48
I&I	187
MC REPS/LNO (1 each)	120
HQMC	506

AVN	20	FD	10
MPR	20	HD	2
I&L	20	JAD	2
PP&O	20	C^4	20
TRNG	10	CL	2
RD&S	10	MED	2
INT	10	PA	50
RESAFF	10	OLA	300

Gen Off Personals	460

STATUS OF MARINE CORPS

Senator JOHNSTON. Please proceed, General.

General GRAY. Our Annual Report to Congress says, in brief terms, that your Marine Corps is fit for service this morning. In this decade we have spent our money wisely, and we have modernized your Marine Corps. We have introduced a whole new family of weapons into the ground combat element. We have added light armored vehicles. We have strengthened our infantry and combat support units. We have introduced three new aircraft into the inventory. We have upgraded our air command and control capability. We have brought on tactical vehicle fleets for logistics. And wherever you go in your Marine Corps, you see new maintenance facilities with good solid repair work going on. You see a Marine Corps where 96 percent of the ground combat essential equipment is ready to go tonight. I think that is worthy of note since we use all of our equipment, as you know. We have tactical aircraft that are this morning 86 percent mission capable. In summary, we have been provided the parts and the support through the Congress and by the people. We are taking care of what we have. We are very proud of our people. They are our most precious resource. We have followed the guidance laid down by the 93rd Congress with respect to quality recruiting. This morning 98 percent of the nearly 200,000 Marines that are on active duty are high school graduates and, as I have said, the other 2 percent better be in some kind of program this morning or we will get some new commanders shortly.

FORCE STRUCTURE CAPABILITIES

I would like to take the remaining part of my time to say that we believe that we must prepare for tomorrow's crises and tomorrow's conflict. We have looked at our force structure to insure capability of meeting tomorrow's challenges. We have looked at where we are and, more importantly, where we have to go.

We see the grand strategy, if you will, really not changing since World War Two. We have to have a nuclear deterrent and we have one. Our strategic nuclear deterrence is the reason we have not had a nuclear holocaust.

We must uphold our responsibilities to Europe and to NATO and we do, as well as to our other allies such as in Northeast Asia, and the like. These are major defense requirements. They are also static in some ways.

We rely on prepositioning equipment. We rely on forward deployed forces. We rely on rapid reinforcement. And to do this well, we have to have in my judgment a strong Army, not just U.S. Army but allied armies, and we have to have strong U.S. air power.

Clearly, however, we also have to be able to use the sea lines of communication. We have to be able to protect them, to use them when we want to, where we want to. We cannot sustain forces or be a credible deterrent without maintaining Pacific and Atlantic sea lines of communication.

We have a balanced naval fleet that can do that today. Its air, surface, and subsurface capability and its amphibious capability operate together with a synergism that the mission demands.

And so a strong Army, a strong Air Force, and a powerful and flexible Navy are requirements for U.S. national defense.

But I do not think we are going to have a nuclear war and I do not think we are going to have a war in Europe or a war in Korea. The reason is because the NATO alliance works, despite its political ups and downs, and we certainly have a powerful capability of deterrence in the northeast Asian arena.

THIRD WORLD CONFLICTS

To me the most likely conflict is in the third world regions, the lesser developed countries. Indeed, as we all know, that goes on today. There have been nearly 300 of those types of conflicts in the Third World since World War Two. Your Navy and your Marine Corps have been involved in most of those crises and conflicts.

I see this area, the Third World regions, as the domain primarily of the sea services. We need and have a balanced fleet for our other requirements. A balanced fleet provides our Commander in Chief with a unique capability in each ocean and, through its air, land, and sea maneuver, an ability to operate independent of political bases, independent of changing political scenes in these regions, and independent of air space rights and all that kind of thing. A balanced fleet can provide military support that along with the other elements of national power can give stability and permit these regions the opportunity to grow and perhaps flourish, and indeed maybe even be free. I see the sea services, with the flexibility and aggregate usefulness of your Navy and Marine Corps team as being instrumental to preserving U.S. national interests in the Third World.

Therefore, it is our intention to take your Marine Corps, to lead it forward even more, to be prepared for these kinds of crises and conflicts, to have a lean, mean, tough, superbly well-trained force, even better than we are today. It's for the global war scenario that we will structure our total force capability, active and reserve. The active force postured through forward deployed forces, through readiness capability, through total preparedness, will be fully ready to provide a universal usefulness and the flexibility that is needed.

TRAINING PROGRAMS

Our training, our campaign approach to training, takes this into consideration. We believe we have done what the Senate has asked for. We have linked the grand strategy and national security objectives and military strategy with our operational requirements and with the plans, both general war and contingency, of the unified and specified commanders. We train all the time in this kind of environment. We probably conduct more joint and combined training operations than anybody else in the world. I believe your Marine Corps is the only force on either side of the iron curtain that can go to war tonight without mobilizing a man. We are not and have no intention of becoming a hollow force.

We have some priorities. We have what we believe, for our role as a naval expeditionary force, is the best close air support aircraft in the world—in the AV–8B. We want to be able to finish that program as indicated in the budget submission.

MV–22 AIRCRAFT

Our number one aviation requirement would be the MV–22. The reason is three words: precision guided munitions. To come from the sea in the future, even in the Third World, where most of these countries, if not all, have precision guided munitions, we must come from over the horizon in our initial efforts.

We owe it to our warriors to be able to do that. We can come from over the horizon with a landing craft, air cushion, with which you are very familiar. And we can come from over the horizon in the air with the MV–22.

That is why the MV–22 is in our program and that is why it is our number one priority today. And we would seek to protect that and to capitalize on that.

The MV–22 is also by far, by several billion dollars far, the most cost effective airframe for us in the future. And if you look at the alternatives, which are to replace this concept with ordinary helicopters, you will see that my figures will stand up. So we want that program. That is why it is in there. We also see the aggregate usefulness for the MV–22 for special operations. It will be, if procured, the best special operations aircraft in the world today. Then finally, I need not tell this august group the MV–22 has the potential to revolutionize commercial and commuter air transportation and all that means. In a way, it is sometimes tough to answer when people say, how come you are on the spearhead, you Marines, of this idea? But that is not unique. We were on the spearhead of the helicopter, we have been on the spearhead of V/STOL aircraft, and now we are on the spearhead of tilt-wing rotary technology.

We also, as you have seen, have lost in the amended budget submission a number of tanks that we intended to procure. Some people think the tanks and my speech about the Third World regions are at odds. Just about all of these countries have armor, antiarmor, artillery, air defense, and a lot of tough people.

Most of the Third World regions have four gas stations. Three of them will have a Soviet ZSU–23 there, and the one that does not, has SA–7's. So this Third World region is going to be a tough nut to crack militarily. We need to keep that in mind. That is why in many of these scenarios you are going to have to fight conventionally and belt that out of there before you can get into the insurgency, counterinsurgency, nation-building idea.

DRAGON 3 PRODUCT IMPROVEMENT PROGRAM

We also want to make sure that our young Marines have upgraded weapons in their hands. That is why you see our request for the Dragon 3 product improvement program. We are solidly behind and have been, as the audit trail indicates, the Army efforts to build new medium level antiarmor systems. We have supported that and still do.

We have the Dragon in the field today. We hit what we shoot at with our Dragons because our Marines work at it and train hard. We pick people who have the right kind of eyes in terms of depth perception to be Dragon gunners. We follow the Pennsylvania State Police eye examinations.

We like what we have, but we know that it does not have the punch to defeat some of the armor that is out there today, even in the Third World regions. Our product improvement program is designed: one, to give us a better punch and to defeat the armor that we know we are going to face; and two, to upgrade our level of missiles. Our missiles are going to fall below our wartime and contingency requirements in a couple of years if we do not have this program.

That is why we have introduced and strongly supported this program. That is why we have invested some of our research and development money prior to the cutoff target last December. And that is why you see my continued support for that in our program today.

So in quick summary, this is but a few of the thoughts that we have. We believe that we can make an enormous contribution to the preparedness of our Nation in the years, indeed the decades, ahead. And we stand ready to back that up.

Thank you very much, sir.

GENERAL QUESTIONING

ACCOMPANIED OVERSEAS TOURS

Senator STEVENS [presiding]. Thank you very much, gentlemen.

Senator Johnston is on the phone, so let me begin a little bit. Mr. Secretary, how many people in the Navy and the Marines now are on accompanied tours overseas? Do you have any figures on that?

Mr. GARRETT. I do not have the actual figures, but I will get them and provide them to you for the record.

Senator STEVENS. Put them in the record.

[The material follows:]

ACCOMPANIED TOURS OVERSEAS

Excluding Hawaii, Alaska and the U.S. Territories, the Marine Corps has 8,105 Marines on accompanied tours overseas. When Hawaii, Alaska and the U.S. Territories are included, there are 11,828 Marines serving on accompanied tours outside the continental United States.

ACCOMPANIED TOURS

Senator STEVENS. Is it fair to say that the number of accompanied tours is increasing now? I know, for instance, General Gray, in Okinawa a considerable increase of accompanied tours of Marines in Okinawa, and I see there are more accompanied tours in the Navy to the Mediterranean. Is it increasing?

Mr. GARRETT. I do not believe it is increasing. It may have. It depends, I guess, on where you start measuring from, Senator. But certainly, most of our people in the Navy who go overseas go so in a deployed status. The Marine Corps has, I think, both accompanied and unaccompanied tours in Okinawa.

And as far as I know—the CNO and the Commandant may wish to elaborate—our shore establishments there remain relatively flat. So I do not believe that they are increasing. But I will check and answer that for the record.

DECREASE IN DOLLAR VALUE VERSUS YEN

Senator STEVENS. Well, I see it in terms of people. We are looking, as I said yesterday to the people who were here yesterday, at the change in Japan alone of, just since the budget was submitted, a change from 163 yen to the dollar to 128 yen to the dollar.

There is a perceptible, almost a 40 percent, change since this budget was presented in January. And I see a trend of increased accompanied tours abroad taking place at the same time, which I think is counterproductive if it is taking place.

I just would like the record to show whether that is true or not.

Mr. GARRETT. We will provide that for the record. I certainly do not disagree with you, Senator Stevens. It is a very difficult issue for our people, who must suffer these fluctuations in the value of the dollar. And I would submit that on its face it would be counterproductive for our people.

But I do not believe that in the Navy and the Marine Corps—and again, I will provide that for the record—our unaccompanied tours, per se, are on an increase. That is not to say that there is not some perturbation short term, but let me check that and we will get back to you.

Senator STEVENS. That is something that we have to look into.

I am told that a $10 sporting event that a dependent child would go to off base in Japan or Germany, say, 5 years ago, would be in the range of $20 or $25 now in terms of U.S. money.

Mr. GARRETT. I was just on a brief tour to WESTPAC, where I paid $4.25, I think, for a cup of coffee on the economy. And someone related to me a story where they had been shopping that morning and cantelope was running $80 apiece in U.S. currency, as opposed to the Japanese yen. It is exceedingly expensive.

It is a very onerous burden for our people to bear.

Senator STEVENS. I would like to see those figures.

Mr. GARRETT. I will provide them for the record.

[The information follows:]

NAVY OVERSEAS POPULATION

Navy's overseas population is divided between those members who are permanently assigned to shore duty and those assigned to ships homeported overseas.

As the following information shows, our accompanied member populations (including Alaska and Hawaii) have remained fairly level since the end of FY-86:

ACCOMPANIED MEMBERS STATIONED OVERSEAS

	End—		Current (as of 30 Mar 88)
	FY-86	FY-87	
Sea:			
Officers	656	669	719
Enlisted	5,469	5,431	5,714
Shore:			
Officers	3,314	3,175	3,165
Enlisted	16,166	16,323	16,017
Total:			
Officers	3,970	3,844	3,884
Enlisted	21,635	21,754	21,731
Grand total	25,605	25,598	25,615

Some increase in the number of accompanied personnel stationed overseas on shore duty should be expected because of the increased DoD tour lengths (reported to the Congress on 1 October 1986.)

RETIRING OF 16 FRIGATES

Senator STEVENS. Let me go to another subject, and that is this. The budget proposes retiring 16 frigates, with a savings of $165 million and a manpower reduction of 4,400 people. GAO has given our people a study that indicates five of the 16 ships are currently being overhauled and one actually entered overhaul in January of this year, and they estimate that we are spending $100 million now in fiscal year 1988 on vessels that we would save $165 million on in 1989 by retiring.

Now, I am not trying to be provocative in this, but I just wonder, was a review given of the modernization and overhaul investments in these ships before we decided which ones to retire?

Mr. GARRETT. I would first say, Mr. Chairman, that your question is a very good one, and I think you can appreciate, given the time the budget summit agreement came down, which was late November, many of these ships had been in overhaul for some period of time.

And, in fact, I think two went in relatively soon after the decision. I personally made the decision to keep one of those ships in overhaul, simply because I was faced with a very fluid situation, as we were proposing to the Secretary of Defense the recommendations regarding the 1989 budget submit.

And we still have not made a final decision as to what will be done with these eight ships that will go out in 1988 and the eight that will go out in 1989, whether they will be mothballed. My conclusion was that, if, in fact, we were going to put them in mothballs and retain them, then we should do so in the best state of readiness that we could.

As I say, many of these ships were nearing completion of their overhauls. There were only two that I felt a decision had to be made and I made it.

OVERHAUL COSTS OF FIVE FRIGATES

Senator STEVENS. Well, as to the five that are currently being overhauled, could you give us the figures on what it would cost? What would be the balance in terms of putting them to work if they have been overhauled and have an increased useful life? And it would change the manpower reduction.

But what if we would decide to use those five for the period that they would be usable and accept your recommendations on the eleven? Can you give us for the record how that would break down?

Mr. GARRETT. We can give you an analysis.

Admiral TROST. We can do that, Senator Stevens. Our plan and the plan I have requested and received from the fleet commanders on proposals of how these ships would be utilized and when they would be decommissioned, takes into account their overhaul status and their overall materiel status. So the phasing and operation of those ships over the balance of this year and the next fiscal year will take into account their materiel status.

I should note that we did not lose the personnel from those ships. They remain in the Navy authorization because we have a shortfall overall, and that fact was recognized by the Secretary of Defense when he provided his direction.

[The information follows:]

RETENTION OF SHIPS IN OVERHAUL

Information on the retention of the four FF 1040 and one FFG 1 ships now in overhaul follows:

Ship	Homeport	30-Year projected decommission
USS Garcia (FF 1040)	Charleston, SC	December 1994
USS Brumby (FF 1044)	Charleston, SC	August 1995
USS Davidson (FF 1045)	Pearl Harbor, HI	December 1995
USS Koelsch (FF 1049)	Mayport, FL	June 1997
USS J.A. Furer (FFG 6)	Charleston, SC	November 1997

Average anual operating costs per ship ($M)

	FY 90	FY 91	FY 92	FY 93	FY 94
Personnel	8.5	8.7	9.0	9.3	9.6
Direct operating	2.5	2.6	2.7	2.7	2.8
Direct maintenance	.6	.62	.64	.66	.67
Phased maintenance	5.0	.3	5.4	.4	6.8
Total	16.6	12.22	17.74	13.04	19.87
Annual total	83.0	61.1	88.7	65.2	99.35

COST OF OPERATING FRIGATES OUT OF ALASKA

Senator STEVENS. Mr. Chairman, just so I could not be accused of forgetting to be provincial about these things, if you were operating those five frigates out of Alaska rather than Japan, it would cost you half as much in terms of the current circumstances—fuel, shore-based services, and cantelopes, too. We sell cantelopes for a lot less than $80, although they are pretty expensive, we always thought.

Admiral TROST. I agree. Having lived in Japan, I should note that, yes, fruits are very expensive in Japan, and the rate of exchange has in fact declined. That is causing impact on our personnel stationed there, as well as on those costs that we bear over and above the roughly 40 to 50 percent that the Japanese cover in sustaining our forces there.

Senator STEVENS. Kodiak used to function very well with a great Marine battalion there and several Navy vessels. And there are several other places that would like to see you come back. But we will pursue that during my next round.

Thank you, Mr. Chairman.

Senator JOHNSTON [presiding]. Thank you, Senator Stevens.

SERVICES REDUCTIONS IN 5-YEAR DEFENSE PLANS

Secretary Garrett, the Army, the Navy, and the Air Force have made projections as to the reductions they must make from their previous 5-year defense plans to meet Secretary Carlucci's goals.

How much of a cut do you project the Navy must make in the outyears—that is, say, 1990 to 1994—to meet these projections?

Mr. GARRETT. I have not made a projection through the entire 5-year defense plan, Mr. Chairman. I project, however, in 1990 a $17 billion reduction and anticipate going to $20 billion and $22 billion in 1991 and 1992 respectively.

Senator JOHNSTON. That is based on the 3 percent?

Mr. GARRETT. It is based on 2-percent growth, a real growth from the 1989 figure, using 1989 as a baseline, with 2 percent real growth.

Senator JOHNSTON. Is that going to be doable with the Navy?

Mr. GARRETT. It is certainly not what we would like, but I think we can do it.

I referred the other day to a need, and I think also in my statement, for stable growth. I think Secretary Carlucci alluded to that issue in testimony before one of the committees, where he concluded that had we had steady real growth from the early to mid 1970's through today, we would be just as well off as we are today, as opposed to the sinusoidal sort of process that we have gone through.

It is not going to be easy, Mr. Chairman. But I think, based on my reviews—and we are looking very hard now at putting together, as you know, the 5-year defense plan for the Navy—that it is doable. It is not what we would like, but I think we can do it.

PROTECTION OF PERSONNEL

Senator JOHNSTON. Have you gotten any directions from OSD as to areas to protect or areas to cut, any general directions?

Mr. GARRETT. Our primary emphasis as I have said—and I think the Commandant and the CNO would certainly agree—is protecting our people. I can have the best, and the CNO can have the best, technologically advanced equipment sitting out there on the waterfront; if we do not have the people, it is of little value to us.

I have not received any explicit direction as to what I should fence and what I should not fence. I should tell you that the Department of the Navy under Secretary Webb, and it will continue, I am sure, under

Secretary Ball, protected the medical side of our budget, to repair our house, if you will, as it relates to the ability to care for our active duty, retired and dependent people.

But other than that, I have received no explicit direction from the Department. We will go through that process as the months unfold.

Senator JOHNSTON. Did you have something to add, Admiral Trost?

Admiral TROST. If I could, Mr. Chairman, I would add one comment. When we say is it doable to take these reductions, certainly we will have a Navy next year, we will have one beyond. We are starting from a very good posture.

Here is what we sacrifice. We are going to in the near term, and that is this year, next year, any year in the near term, do our very best to protect: first, personnel readiness; and then overall readiness of existing forces. What we have to recognize is that we are increasing the risk of our ability to do the job we are paid to do, and we are increasing it even more markedly in the future because we are mortgaging the future.

We are going to be cutting back on such things as near term modernization of ships and aircraft to meet what is a documented, evolving threat. So we are going to have older forces that are not as capable. We are going to cut back on the improvements in our ability to sustain our forces in combat. We are going to cut back on new force structure procurement, which means that the basis for tomorrow's readiness will not be there at some point in time.

RETIREMENT OF 16 FRIGATES

Senator JOHNSTON. Speaking of readiness, given the numbers that have come out of the budget summit, which everyone recognizes must be enforced, do you concur with the decision to retire the 16 frigates, as opposed to it?

Admiral TROST. I did not concur in that recommendation initially. I would like to have those ships. But I am also a practical man and know that we have to make cuts of lowest capability forces in order to have the funds and the people for the out-years. At this point in time, my position is that I need the people for other purposes, because we have not gotten the additional end strength, because we cannot afford the added end strength.

Senator JOHNSTON. In effect, you disagree with the overall amount that the Navy was given?

Admiral TROST. That is correct.

Senator JOHNSTON. But having been given that amount, the retirement of 16 frigates was necessary, is that correct?

Admiral TROST. I will accept that decision. It was made. My job is now to do the best with what we have remaining.

SCN PLAN

Senator JOHNSTON. Mr. Secretary, I am very concerned about the Navy lowering its requirement, its apparent requirement, to only three Aegis ships per year. Would you comment on that?

Mr. GARRETT. Yes, Mr. Chairman. I too am concerned, not only with the Aegis ships, but with the SCN plan as a whole. I do not think we have lowered our requirements per se. We have continued to procure those ships in sufficient numbers, I think, to afford us the best competitive position, and also to fill out and to meet our requirements.

I think it is fair to say that the reduction in the 1989 SCN plan was simply a matter of affordability.

Senator JOHNSTON. You are proceeding, I trust, with the directions in the bill last year to compete that program. Would you tell us what plans you have?

Mr. GARRETT. We will comply with the continuing resolution language. As you know, there were two full and open competitions for the first Aegis class DDG-51's. Our competitive strategy and our acquisition strategy I think from the outset anticipated a leader-follower. We will, however, comply with the language of the CRA in the follow-on procurement.

COMPETITION

Senator JOHNSTON. And how do you plan to do that competition?

Mr. GARRETT. My understanding is we will do it in essentially the same way we have in the past. We have a problem, of course. It is one we are looking at regarding sufficient numbers in the budget to provide for more than a leader/follower situation as opposed to three or more shipyards.

Senator JOHNSTON. You understand that the language did not provide for three?

Mr. GARRETT. I understand that the language, as I recall, I have not looked at it for some time, provides that when the Secretary of the Navy can certify that there are sufficient ships in the budget line, then we can go to more than two builders.

Senator JOHNSTON. Let me read it. It says,

> The contracts awarded for any DDG-51 class destroyers in fiscal year 1989 shall be made on the basis of a full and open competition among all technically qualified bidders regardless of prior contractual experience or construction of DDG-51 destroyers. More than two shipyards may not be utilized for this purpose unless the Secretary of the Navy certifies that the 5-year defense plan is sufficient to support cost effective construction at more than two shipyards.

You understand that means if you have one DDG-51, it must be competed. If you have two, they must be competed. If you have three, they must be competed. The only limitation on that is that you cannot use more than 2 yards unless there is a certification.

Mr. GARRETT. Correct.

Senator JOHNSTON. There is no problem with the language.

Mr. GARRETT. We will compete them, and the RFP will be issued shortly.

LEAD AND FOLLOW-ON

Senator JOHNSTON. You said something about a lead and a follow-on?

Mr. GARRETT. That was the initial strategy as it evolved prior to my coming on board. But as I said before, and before this hearing, we will compete the ships that are in the budget.

Senator JOHNSTON. Whatever number you have?

Mr. GARRETT. In 1989, we have three.

Senator JOHNSTON. Those three will be competed?

Mr. GARRETT. They will be competed, yes.

Senator JOHNSTON. That is good.

Mr. GARRETT. An RFP should be issued shortly.

Senator JOHNSTON. Great.

EXPORTING U.S. TECHNOLOGY TO JAPAN

Now, Mr. Secretary, I am very concerned, as I think others are on this committee, but let me speak for myself, for the apparent plans to send this technology to Japan.

I know we have been trying to get Japan to increase its defense spending, but it seems to me that the very worst way to do it is by sending our most sensitive technology to them where they could then compete against us.

I have spoken about that concern before with the Secretary of Defense, and let me say from my standpoint, unless I hear some reason I have never heard before, it would be my purpose strongly to oppose that.

Do you have any good arguments to make now to try to dissuade me and perhaps others from that?

Mr. GARRETT. I am not sure that any arguments that I might have this morning, Mr. Chairman, would persuade you. We, as you point out, have been attempting for some time to increase burdensharing, if you will, and the CNO can speak to the operational side of the Aegis ships in Japan.

I personally support it. I think, notwithstanding some of the events in recent months regarding private entities within Japan, that our navy-to-navy relationships with the Japanese have been superior. We have never, to my knowledge, had any basis upon which to conclude that technology would be compromised or exploited to a degree beyond whatever understanding we might have with them.

I have heard proposals to station more ships in Japan. I think, given the fiscal constraints that we face, that would be counterproductive and not consistent with the realities of today. As you know, the Secretary of Defense has come out in support of the transfer, as has the Chairman of the Joint Chiefs.

CNO may want to address the operational side.

Admiral TROST. If I may, Mr. Chairman, I will discuss the operational aspects.

Senator JOHNSTON. Yes.

OPERATIONAL ASPECTS OF BURDENSHARING

Admiral TROST. We successfully persuaded the Japanese to accept our concept about 7 or 8 years ago that they should expand their role in our mutual defensive efforts in a crisis situation by accepting responsibility for protection of sea lanes of communication for a distance out to 1,000 miles from the Japanese homeland. They have proceeded to build the kind of maritime self-defense forces necessary to do that task.

We also advised them that the greatest shortfall that we saw in their capability was their anti-air war capability in their existing ships and urged that they take steps to improve that capability as well as to enhance the interoperability between the air self-defense force and the maritime self-defense force, the air self-defense force having the E–2C aircraft for its use in airborne early warning.

Senator JOHNSTON. Let me just say I think the use of Aegis by the Japanese to protect those sea lanes out to 1,000 miles is a high priority use. It is not the use I'm concerned with.

Why not let them buy those ships from us while we are shouldering the huge burden? That is the point. They sort of take away with the left hand what they would give us with the right hand. So that is my concern.

Admiral TROST. I understand that. I supported the sale because it was a sale of hardware for installation in their ships, and it was also with the proviso that we maintain control of the software that makes that system operable and with the assurance that reverse engineering would be extremely difficult, time-consuming and counterproductive and, as Secretary Garrett has indicated, the fact that the Japanese defense forces have a record of protection of U.S. defense matters that exceeds that of any other ally.

Senator JOHNSTON. Just very quickly, it is not part of a bigger deal with other offsets from a balance of payment standpoint, is it?

Mr. GARRETT. Not to my knowledge.

V–22 AIRCRAFT

Senator JOHNSTON. General Gray, your statement on the V–22 is a preaching of the choir. I know as far as Senator Stevens and I are concerned, we feel as though we kept that program going when it had not very much interest.

I think the Marines have always had a lot of interest that no one else had back in 1982. I think everyone is exceedingly interested in it now.

What happens to the Marine Corps version of the V–22 if the Army pulls out of the program?

General GRAY. Of course, we do not know what they will do or, for that matter, what the Congress will do or what the Defense Department will do here in the forthcoming program objective memorandum and budget deliberations for next year.

My understanding is that the Army will procure about 213 or 215 aircraft. So, obviously, when you reduce the numbers like that, there is a possibility that the unit cost will go up.

We are concerned about that.

Senator JOHNSTON. I hope we can keep that program going in all the services, because I think, as you say, it is the most cost effective platform.

By the way, I saw the prototype of that being built down in Fort Worth about a month ago, and it is very impressive. I was impressed by the size of it. That will carry a lot of weapons, a lot of men, and do a tremendous job.

By the way, I hope the Navy will follow through on its plans to use it in ASW, because it seems to me, at least, it has huge capabilities in ASW, range and loiter time and all of those things that we have always talked about in ASW. I think it has great capabilities.

General GRAY. We also have a commitment from the Air Force for the special operations requirements. That is holding firm. That will, again, be very, very helpful.

Finally, the aircraft is planned for the presidential upgrade. Certainly the President needs to have the best as well.

So we think that is still a very defensible program in terms of business strategy.

Mr. GARRETT. Mr. Chairman, I would certainly agree with that. It is my intention to support the V–22 program. I have recently entered into conversations with the Under Secretary of the Army designate relative to their interest in this program and hope to be able to persuade him.

NAVY ROLE IN V–22 PROGRAM

Senator JOHNSTON. What role do you see for the Navy in that?

Mr. GARRETT. Say again, sir?

Senator JOHNSTON. What role do you see for the Navy for the V–22?

Mr. GARRETT. You are talking about the SV–22 as opposed to the MV–22 version. We are exploring as we go through the 5-year defense plan, as the Commandant pointed out, the program objectives memoranda for 1990 through 1994, all of the options, and we have the Center for Naval Analysis looking at the issue of the SV–22. Their report is not yet out, but I will certainly take that into consideration as we put the POM together.

Senator JOHNSTON. Clearly, this is something that DOD should look at as a service-coordinated buy, and I know they will. I know that is what Secretary Carlucci is about with respect to unit cost. It is going to be very important to do that, and I hope the Navy will do its part as well as the Army if, in fact, they do share the enthusiasm which I have for the program.

My time is up. I will have some questions in writing.

Senator Kasten.

Senator KASTEN. Mr. Chairman, thank you very much.

First of all, Mr. Secretary, thank you for the work that you have been doing with us in order to save the shipyard.

MINE WARFARE COUNTERMEASURES CAPABILITIES

I want to talk a little bit, about the importance of minesweepers.

Admiral, it seems to me that as we now get into a different kind of naval warfare which involves terrorist organizations, that mines, in effect, become the naval weapon of choice for terrorists and for third world nations that would not otherwise be a significant sea power.

First of all, is this correct? And, if so, could you describe the use of mines in these small-scale naval battles?

Admiral TROST. Mines certainly have tremendous utility to nations pursuing terrorist aims, because they are simple, they are available, they are extremely effective when used in those shallower constrained waters such as the Persian Gulf and can cause a disproportionate effort to be expended just to counter them.

So the emphasis on mine warfare continues, as does our emphasis on mine warfare countermeasures capabilities and programs.

Senator KASTEN. Let us talk about that for a second.

Are you satisfied with the mine warfare countermeasure capabilities that we have today in the U.S. Navy?

Admiral TROST. No, I am not. If I may, let me reflect a little bit on history. We go back to the early 1970s time frame when we had difficulty getting support for mine warfare programs internally in the Navy because we had at that time more——

Senator KASTEN. The way to get to your job was not necessarily to specialize in mine countermeasures.

Admiral TROST. That is exactly my point. I might note that my contemporaries were by and large those who commanded or were executive officers of minesweepers, and it was very sought-after duty for a young officer. But you do not command large flotillas of minesweepers when they do not exist. Having said that, we did have a lot of platforms, so the need was not seen as being urgent at that time frame.

We did begin at that time the development of our minesweeping helicopter program, which we have proceeded with. We were not permitted by guidance to build more minesweepers in the late 1970s. That was only at the beginning of this decade that that capability became one we could pursue once again, even though our guidance was and continues to be to recognize the capabilities that our NATO allies and our friends in the western Pacific have and to rely on that capability as opposed to trying to buy a go-it-alone capability.

Having said that, we are proceeding with the two classes of minesweeping ships, the MCM class, the first of which is here this week, and the smaller coastal capability, which will give us a capability both for coastal breakout as well as for deployment to strategic areas of interest. The numbers will be fewer than we would like but, again, that is going to be the case, I suspect, for most of our naval forces capability as we see the constrained fiscal guidance descending upon us.

OCEANGOING CAPABILITIES OF MINESWEEPERS

Senator KASTEN. When you were trying to make decisions as to whether to have minesweepers that were based on the East Coast go to the Persian Gulf, there was a rumor that the minesweepers would not make it across the ocean.

I think that concern was voiced in a couple of news articles as well. Is that true? Can they sail?

Admiral TROST. We are talking about ships that are in excess of 30 years old, wooden hulled with old engines. Yes, there was concern about their sailability after 60 days of being pounded by the seas to get over to an operational area. They all got there, and they are operating well.

STATUS OF U.S. SHIPYARDS

Senator KASTEN. Having said this, all of us are aware of the difficulties that we have had both on the Navy and on the manufacturers with regard to trying to catch up.

We have two shipyards and, unfortunately, one of them may be lost within the next 30 days unless we are able to resolve a couple of questions.

Mr. Secretary, can you give me any assurances of the importance of this to you? I know that you have personally spent a lot of time. Where are we? Can you tell me today that we are going to do everything we can to keep this shipyard?

It would be absolutely crazy, listening to the Admiral's testimony, for us to be in the process of, in effect, shutting down one of two shipyards that are able at this moment to get the ships that the Admiral says we need. Two or three of them are under construction.

Where are we, Mr. Secretary?

Mr. GARRETT. Senator, as you and I have discussed, as we speak today we are continuing the negotiations with the shipyard that you are most concerned about.

I want to, as I think I have already, express for the record, first of all, my concern relative to the three ships that are under contract and also my support for the MCM program.

I think, as did the CNO, that it is a vitally important program, and it is one that has suffered neglect far too long. It is my desire to reach a settlement that will allow the Navy to obtain the ships that are under contract and proceed with the program. I see any failure to do that as inimical to the entire program.

I cannot assure you that we are going to satisfy the desires entirely of the other parties. I will assure you, however, that we will continue to work and negotiate in absolute good faith to attempt to achieve a just and equitable settlement that is supportable under the law and regulation and, as you know, to explore other possibilities of insuring that the particular yard in question maintains its capability to fulfill its obligations under the contracts.

LOSS OF SHIPYARDS

Senator KASTEN. In conclusion, we have lost, I am told, since 1980 about 131 shipyards of different sizes and classification. I think it would be tragic, particularly with regard to the present circumstance of the lack of minesweeping capability, to lose one more.

I look forward to working aggressively with you, Mr. Garret, and with you, Admiral, and with others in trying to resolve the particular problem at this one shipyard. More importantly, I look forward to dealing with the larger problem of lack of minesweeper capability.

As we look more and more toward Third World skirmishes and terrorist attacks, it seems to me that mines become more and more a problem, and our minesweeper capability, therefore, becomes more and more important.

Mr. Chairman, I have several other questions that I would like to submit for the record.

Senator JOHNSTON. Without objection.

Thank you, Senator Kasten.

I might mention that Senator Stennis is recovering from the flu, and he may come in later on today; but if he does not make it, he wants to give his very personal regards to each of you and his regrets for not being here today.

Senators Byrd and DeConcini will also have questions in writing.

Senator D'Amato, if you would withhold, I gave Senator Stevens only 5 minutes on his first round, and he has to go. So if he could catch up on that, we will be to you in just a second.

Senator STEVENS. Thank you, Mr. Chairman. I have questions for the record in writing from Senator McClure, and I would like to submit some of my own.

MARINE FIELD TRAINING

I want to ask General Gray just one question.

What Senator Johnston says is correct. We kept the V–22 alive when others did not see it. I see it exactly as you do, as a real revolution in terms of aviation.

Having said that, I am constrained to ask you where is your northern training now for the Marines? Is it in Norway?

General GRAY. We have a very extensive program which, believe it or not, starts out in the summer down along the coast of North Carolina and also in California. We teach our Marines basic field craft and that kind of thing. We even have the old green mats for skiing. Then we go on to our mountain warfare and cold weather training camp in Bridgeport, CA up in the high Sierras. We have a very vigorous program there. Then we normally go to either Fort Ripley, MN or Fort McCoy, WI, and we train there. We occasionally go to Canada, and we occasionally, of course, have small groups of instructors and experts that come to your State.

Then we follow that with a program in North Norway. So it is a continuous training program throughout the year.

We have a bottom line requirement. We keep a minimum of two battalion landing teams in active duty and two in reserve structure fully ski-trained. Of course, our reconnaissance personnel and others are also ski-trained. Our aviation units and the combat service support units also train throughout that environment.

WINTER TRAINING IN ALASKA

Senator STEVENS. I just want to call your attention to the fact that the Congress and our State legislature are setting aside some specific areas for winter training at the request of the Department of Defense, and I would hope that you would take a look at them, because I really think that the people who are potential enemies live daily in the areas that your people train in for a day or two.

As I said, we used to have Marine detachments in the northland, but we have none now. I really think that the V–22, when it comes on line, ought to be really proven in all weather conditions and particularly in cold weather conditions.

So I hope that you come up and take a look at the Black Rapids country that we are setting aside for that purpose.

General GRAY. I would be glad to do that.

I would hope that you and others on this committee would be very concerned about the fact that your Marine Corps is going to have to give up a reinforced regiment in this budget submission. That is almost 3,000 people, 2,900 by the time the bean counters get done playing with it.

Mechanically, you do that through reduced recruit accessions so that you get down in October to the authorized end strength and, therefore, the country can capitalize on the outlay, one for one.

But we should not get that mixed up with the fact that there are going to be three less infantry battalions in your Marine Corps this time next year because of this.

Clearly, if we have declining resources of muscle, it is going to be tougher to train anywhere, including Alaska.

Senator STEVENS. That would be just all the more reason to train where it is really cold.

Senator KASTEN. You know, it is cold in Wisconsin.

Senator STEVENS. In the summertime in Wisconsin, that is skiing in the sunshine.

Let me go to the Secretary. I remember the time when the former person in charge of OMB instructed members of the administration that they were not to respond to requests from Senate committees to testify without his approval.

In two committees that I served on at that time, every time we confirmed someone for an appointment, we put them under oath and asked them the question "Would they appear without a subpoena?" Until they answered yes they were not confirmed.

VALIDITY OF CONGRESSIONAL REPORTS

Now, we have a little bit of a fight going on with a fellow downtown named Miller. I know he wrote a memorandum on March 15 to all cabinet officers and agency heads, and one paragraph says this. "I remind you and ask you that you remind all employees of your agency that congressional reports have no force of law. They are not approved by vote on the floor of either house of Congress, nor are they presented to the President for his signature."

Section 107 of the continuing resolution we passed last year says, "amounts and authorities provided by this resolution shall be in accordance with reports accompanying the bills passed by or reported by the Congress."

Now, my question to you is are you going to listen to this fellow Miller downtown, or are you going to listen to the report that we wrote?

[Laughter.]

Mr. GARRETT. Senator Stevens, I must confess that I try to listen carefully to everyone who gives me direction and certainly those to whom I am responsible, including the Congress.

Senator STEVENS. I would suggest to you that Mr. Miller is wrong. In the law it specifically says that they be in accordance with the reports.

If he would like to have us change that to say, and I shall so suggest this year, that the language in the reports accompanying these bills are parts of these bills and shall be treated as being fully part of this law, then we will do it.

But my understanding of the Constitution is we provide the money to run the government, and Mr. Miller manages it.

Mr. GARRETT. That is my understanding of the Constitution.

Senator STEVENS. Thank you very much.

Senator JOHNSTON. Render unto Miller that which he appropriates and unto the Congress that which we appropriate.

[Laughter.]

Mr. GARRETT. The process, as you know, is not without its problems. I do not necessarily see in many instances irreconcilable differences, and I understand the law.

Senator STEVENS. I understand, but I think Mr. Miller has some different objectives right now than we do, and I do not believe that just because a request is changed or in some way modified by the Congress it suddenly becomes pork. He says it is.

I do not like to eat pork any more than he does, but as a practical matter the priorities set by Congress are the priorities that become a matter of law. The priorities that come up to us in the President's budget are requests for action by Congress. They are not part of the law.

I think it is time that Mr. Miller read the Constitution and particularly read this bill that we passed last year. We are seeing to it that he gets copies of it.

CRUISER AND AIRCRAFT CARRIER REQUEST

Senator JOHNSTON. Our two aircraft carriers were not requested.

Senator STEVENS. That is right, they were not requested, the two aircraft carriers, nor were about five of your cruisers.

I think it is imperative that the Department of Defense understand that this is anti-Department of Defense instruction. The major changes in the President's budget in terms of priorities were established by Congress and the Department of Defense.

Mr. GARRETT. I can assure you, Senator Stevens and the members of this committee, that in making decisions, while I am the Acting Secretary as well as when Mr. Ball comes on board, we will comply with the law.

I understand what you say, and finding out what the law says oftentimes is not the easiest process in reconciling congressional reports, appropriations bills, authorization bills, but we eventually get there, and we will comply with the law.

Senator STEVENS. Mr. Sullivan reminds me that the changes I mentioned were all made in reports, and we picked up money that was in the pipeline that was not going to be used for functions we originally contemplated and shifted that over so that money could be used for your new ships.

Mr. Miller would have let that money lapse. We preserved it and extended it.

So if the Department of Defense follows Mr. Miller's suggestion, it is my feeling you have about $30 billion less to spend in the coming 2 years than you think you do.

So I think we really should examine what Mr. Miller is talking about. It is not really what appears on the surface. It is antidefense to take that position that we cannot extend money we had previously provided to the Department and make it available for other functions.

I have used too much time, Mr. Chairman. I will have some questions for the record. I thank you very much.

Thank you, gentlemen.

Senator JOHNSTON. Senator D'Amato.

Senator D'AMATO. Thank you, Mr. Chairman.

Mr. Chairman, I have asked that a number of questions that I have be submitted for the record rather than take the time of this committee.

PREPARED STATEMENT

I also have a prepared statement that I ask be included in the record as if read in its entirety, Mr. Chairman.

[The prepared statement by Senator D'Amato follows:]

PREPARED STATEMENT OF HON. ALFONSE D'AMATO

U.S. SENATOR FROM NEW YORK

Mr. Chairman, I would like to welcome to this hearing H. Lawrence Garrett, Under Secretary of the Navy, Admiral Carlisle Trost, Chief of Naval Operations, and General A.M. Gray, Commandant of the Marine Corps.

For fiscal year 1989, the Navy has requested $96.4 billion, which is $12.3 billion below the original request made last year of $108.7 billion. I have been, and continue to be, a supporter of strengthening our Navy by increasing the number and quality of our naval vessels and aircraft. I am particularly disappointed that the goal of 600 ships has been postponed. Remember that, in 1964, we had 917 active ships. By the late seventies, the Navy's strength had fallen below 500 ships. Yet the demands of its mission have grown exponentially.

Because of its forward-deployed, quick response role, the Navy, in particular, must continually modernize to meet the threat. The decline in our naval power in the 1970s was matched by an awesome growth of Soviet naval power. Not only has the Soviet Union increased the number of ships and submarines, they have vastly improved the quality of their craft. The quality of our Navy remains ahead of the Soviets, but this lead has been tragically compromised by Soviet espionage, particularly by the Walker family spy ring and the Toshiba technology transfer.

To meet the already overwhelming threat of the Soviet Navy, the vital programs requested by the Navy must be fully funded by Congress. Congress must provide continued support for the strategic homeporting plan, dispersing our growing fleet to complicate Soviet conventional warfare targeting, as well as continued support for research and development to counter an increasing Soviet undersea threat.

I am very disturbed, however, over the termination of the A-6F Intruder aircraft and the retirement of 16 frigates. The A-6F would have improved Navy carrier attack capabilities until the Advanced Tactical Aircraft was produced. As you are aware, this committee supported the inclusion of nearly $700 million for the A-6F. I understand budget concerns preclude the possible production of this aircraft. It is my hope, however, that the Navy will continue to build A-6E's that incorporate some A-6F technology. Although I would like to see the ATA be placed on the carrier decks as soon as possible, the Navy is deceiving itself by thinking that such a sophisticated program can be successfully expedited. If we discontinue A-6 production, there will be a period between now and the production of the ATA when our aircraft will not be able to meet the Soviet threat. Also, if hostilities broke out, there will be no operating production line for all-weather capable bombers.

I am also very concerned about the retirement of 16 frigates during this fiscal year and the next. At least half of these ships were stationed in the Caribbean and worked with the Coast Guard for drug interdiction efforts. I will be interested to know how the Navy plans to replace this mission. Mr. Chairman, the growth of our drug problem is as serious a threat to our national security as the growth of the Soviet military. The Navy needs to be increasing its drug interdiction efforts, not decreasing them.

I look forward to working with you, Mr. Secretary, Admiral Trost and General Gray, as we work to complete the Navy's strategic modernization program.

Thank you, Mr. Chairman.

TERMINATION OF A-6F INTRUDER AIRCRAFT

Senator D'AMATO. I call to the attention of the Secretary and the Admiral at least two concerns that I have.

One, I am deeply disturbed over the termination of the A-6F Intruder aircraft and the retirement of 16 frigates. There is no way possible you are going to get the ATA on board as soon as you believe. You have a real problem with the number of A-6Es and seeing to it that our carriers are going to have enough of these planes.

If we discontinue the A-6 production, there is going to be a period between now and the production of the ATA when our aircraft will not be able to meet the threats and the problems attendant.

DRUG INTERDICTION EFFORTS

I am also very concerned about the retirement of 16 frigates during this fiscal year and next. At least half of these were stationed in the Caribbean and worked with the Coast Guard for drug interdiction efforts.

Let me say to you that while we talk about the war on drugs, it has become more rhetoric than real action. I would be interested in knowing how the Navy plans to replace this mission, Mr. Chairman. The growth of the drug problem is a serious threat to our national security.

This is one Senator who has voted for just about every appropriations request as it relates to our armed services. I have always extended the benefit of the doubt as it relates to those requests that have been made by our President in the interest of national security and defense, but I have to tell you it seems to me that we have a greater problem and risk to our national security with the drug epidemic with the lack of will by the institutional services for the Defense Department to become involved in this battle.

I am sick and tired of hearing this business to the talk about impairing our readiness. If it is the law, we had better change it. That has just been used as an excuse to keep the military out of what I would think would be the kind of commitment that the American public would demand of us as it relates to interdiction efforts.

I am not going to engage in any back and forth, but I think we have done a poor job in that effort.

Thank you, Mr. Chairman.

Senator JOHNSTON. Thank you.

Senator Cochran.

STRATEGIC HOMEPORTING PROGRAM

Senator COCHRAN. Mr. Chairman, let me welcome Secretary Garrett. This is his first appearance before our subcommittee, and I think the statement that has been provided to us provides a very good overview of the Navy, where we are, what the successes have been, and also the areas that need attention and funding.

I understand that in the short time you have served as Under Secretary of the Navy, you have established an excellent relationship with not only those with whom you work here in Congress but also your subordinates in the Navy. I congratulate you on your performance.

There are some obvious constraints that we have got to deal with in this budget year. One of the initiatives over the past 3 years that has attracted a great deal of attention is the Strategic Homeporting Program. That was not really discussed or highlighted in your statement.

Could you give us an idea of how this program is progressing? What is the schedule, and the funding that will be required as you see it?

Mr. GARRETT. Senator, I would like to, if I may, provide you a comprehensive answer for the record as far as scheduling and funding across the years.

As I see it, at this point in time we continue to support to the degree that we are able, given the funding constraints under which we are operating, the original plans that the Department entered into for strategic home porting.

For example, an issue was addressed during the process under which we were putting together the 1989 amended budget submission, and we were able to protect to a very large degree the funding that we had in the budget for strategic home porting.

So I do not see us backing off of that. Certainly I will continue to support it, and if I am not mistaken I think Secretary Ball will as well.

Where we have cut some funds, and I know there have been some cuts, it is primarily a function of the phasing of the anticipated arrivals to those ports of the ships. We are trying to sequence it in a way that makes sense.

I would ask the CNO if he has any points he would like to make, but I will provide you a more definitive statement, if I may, for the record.

[The information follows:]

STRATEGIC HOMEPORTING PROGRAM

For the Strategic Homeporting Program Navy is requesting $207 million, including $39 million for Naval Station Staten Island; $95 million for the Gulf Coast home ports of Pensacola, Mobile, Pascagoula, Lake Charles, Galveston, and Ingleside; and $73 million for Naval Station Everett.

In developing the FY-89 budget for the Strategic Homeporting Program, the Navy was particularly sensitive to previous Congressional guidance to stretch out construction funding. Our proposed FY-89 budget defers some projects previously included in the biennial budget submitted last year, but properly balances construction schedules, current ship arrival targets, and funding constraints. Although previous project deferrals have disrupted construction schedules and contract packaging plans, placing increased inflationary pressures on this program, facilities essential to activation of the new home ports are still accommodated within original program estimates. However, original programs have required adjustment to reflect congressional direction and actual contract costs; and it is essential that the proposed FY-89 program be fully funded to avoid further disruptions and associated cost increases.

The infrastructure development being carried out under the Strategic Homeporting Program is essential to adequately berth and properly support the capital ships that make up our current carrier and battleship battlegroups. We are truly straining to support today's fleet. Our Battlegroups return after long and arduous deployments only to find overcrowded piers and less than adequate shore facilities. Some may feel that this problem would be reduced if fleet growth was limited. However, the Strategic Homeporting Program directly addresses essential support requirements for three Battleships, three Carriers, and their supporting Battlegroups. Marginal adjustments in the number of supporting ships that would make up the fleet of the 1990's will not diminish the critical need to expand our country's maritime infrastructure to support the carriers and battleships in our fleet. With this need in mind, full support for homeporting construction included in this budget is solicited.

NEW THREAT UPGRADE PROGRAM

Senator COCHRAN. I appreciate the more comprehensive report.

The statement that you have given to the committee points up the dependence of the U.S. shipbuilding industry on Navy contracts. We are all well aware of that dilemma and the problems that industry faces.

You also mention the importance of competition between public and private yards for overhauls.

One of the major programs in this area is the New Threat Upgrade Program.

What is the Navy's position with respect to competing this program between public and private shipyards?

Mr. GARRETT. I think, generally, I would like to see that continue to the degree that we are able. We are trying hard to protect that portion of modernization as we go down the pike.

My own view is I think that the competition between the public and private shipyards, as I understand it, approximately 10 percent of our work goes in the competition arena. The balance is essentially scheduled and designated.

It has had, in my opinion, at least as I have gone out to the public yards, a very positive effect on the way in which we are managing our shipyards and the increased efficiencies within the yards.

If I can derive that kind of productivity and those kinds of gains, I would like to see it continue.

Senator COCHRAN. It would be helpful, I think, for us to understand what the past practices have been. If you could supply for the record an indication of overhaul contracts and how many have gone to public yards and how many to private yards.

I think there have been some 28 overhauls that have been competed, but that can be supplied for the record.

Mr. GARRETT. There is no question in my mind that the eight public yards that we have are a very valuable national asset, and I would like to see them remain. We will support that.

I would also like to see the efficiency with which we operate increased to the highest possible level.

Senator COCHRAN. Thank you very much, Mr. Chairman.

Senator JOHNSTON. Thank you very much, Senator.

[The information follows:]

OVERHAULS AWARDED TO PRIVATE YARDS

Since the inception of the public/private competition program in 1985 to the present, 12 regular overhauls have been awarded to private yards. As of 31 March 1988, the status of the public/private competition program is as follows:

Type of availability	Number of availabilities	Private won	Public won
FY 1985: ROH	1	1	
FY 1986:			
ROH	9	5	4
SRA	3	1	2
Total	12	6	6
FY 1987:			
ROH	6	3	3
ERP	1		1
DSRA	5	2	3
PMA	3	3	
Total	15	8	7
FY 1988:			
ROH	[1]5	3	
ERP	2	2	
DSRA	[2]8	1	5
SRA	[3]4	2	
Total	19	8	5
Grand total	[4]47	23	18

[1] Two not yet awarded/assigned.
[2] Two not yet awarded/assigned.
[3] Two not yet awarded/assigned.
[4] Six pending award/assignment.

ROH—Regular overhaul
ERP—Extended refit period
DSRA—Docking selected restricted availability
SRA—Selected restricted availability
PMA—Phased maintenance availability

DRAGON-3

Senator Johnston. Just one question here, General Gray, on the Dragon–3. The data which we have would indicate that the Dragon–3 is really not much more capable than the Dragon–2 or really more capable than the improved Dragon that is in the field now.

Yet, the development cost of the Dragon–3 is $300 million or in that order of magnitude.

Can you comment on that?

General Gray. What I would like to do is provide the detailed data for the record, sir, if I may. It is a very important question and it deserves a totally accurate answer.

Basically, we believe that the Dragon–3 will be much more lethal than the Dragon–2. We would like to provide the background data for that.

Senator Johnston. I would invite you to reassess that. As I say, we have the performance reports here, and it does not appear to us that there is sufficient improvement in Dragon–3 over Dragon-2 to justify the cost. If you would reevaluate in light of the cost, we would appreciate it.

General Gray. Yes, sir, we will. What I would really like to do is sit down and talk with whoever keeps bringing this up from your group. I think we can straighten this out if we just have a man-to-man conversation across the table. Otherwise, we will be doing the same thing we did last year.

Senator JOHNSTON. That can be arranged.

[The information follows:]

DRAGON

Stationary target	Dragon-I	Dragon-II	Dragon-III
	SINGLE-SHOT PROBABILITY OF KILL [1]		
T-72	[Deleted]	[Deleted]	[Deleted]
T-80	[Deleted]	[Deleted]	[Deleted]
	AGAINST TANK WITH REACTIVE ARMOR		
T-72	[Deleted]	[Deleted]	[Deleted [2]]
T-80	[Deleted]	[Deleted]	[Deleted [2]]

[1] Fully exposed target at 1000M, based on AMSAA report AMXSY-GI(70B) of 21 Oct 87.

[2] Computed withouto precursor charge. With precursos, PK will improve significantly.

SUBMITTED QUESTIONS

Senator JOHNSTON. Gentlemen, I have some questions for the record from Senator McClure. I want to thank Secretary Garrett for his testimony before the committee. He passed with flying colors, as did you, General Gray. It is a great pleasure to have all of you here and to welcome you back for many other both formal and informal sessions.

Thank you.

Mr. GARRETT. Thank you, Mr. Chairman.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

QUESTIONS SUBMITTED BY SENATOR JOHNSTON

NAVY RESOURCES IN DRUG INTERDICTION

Question. What level of resources is the Navy planning to commit to the war on drugs in fiscal year 1989?

Answer. During fiscal year 1987 Navy aircraft flew over 9700 flying hours and Navy ships provided over 2500 steaming days in support of the war on drugs. These operations were scheduled in conjunction with training requirements as permitted by military commitments. The Navy intends to continue to support this vital effort to the maximum extent, consistent with the National mandate to maintain military preparedness. Specific commitments are made through a quarterly scheduling process that is dependent on many variables and cannot be predicted in advance.

AEGIS SHIPS

QUESTION: Mr. Secretary, I understand the Navy only plans to buy three AEGIS ships in fiscal year 1989. How much more per ship will this cost instead of maintaining a production rate of five Aegis ships?

ANSWER: The unit cost of three DDG 51s in FY-89 is $735 million. The unit cost could be up to about $35 million less per ship for a five ship buy.

QUESTION: Do you believe this is a cost effective decision?

ANSWER: The Navy originally had five Aegis ships in the FY 1989 column of the FY 1988/1989 Shipbuilding Budget Request. This would have been a more economical procurement and would have helped to alleviate our shortfall in Battlegroup anti-air warfare combatants. However, the $12.255 billion reduction in the Navy FY 1989 budget necessitated some force structure reductions.

QUESTION: Admiral Trost. I have been led to believe that the AEGIS ships provide a significant new capability to the Fleet, one that greatly improves our Navy. As the senior Naval Officer, can you briefly describe the performance of the AEGIS ship as best you know it?

ANSWER: Seldom has a system made such an immediate and profound impact on a warfighting mission area as the AEGIS cruiser has made on the Navy's antiair warfare mission. What was a critical problem area--in view of the development of the Soviet air threat--is now under control. Effectively, AEGIS takes our fleet at one jump from the 1960s to the 1990s and beyond. It helps provide our margin of confidence in the soundness of our offensive strategy. And it enhances our ability to use other surface assets, like the battleship, in limited applications beyond the umbrella of carrier air power. The AEGIS system's powerful phased-array radar can detect incoming missiles at long ranges, and its automated fire-control equipment can track and engage many targets simultaneously. A single AEGIS ship gives the battle force commander the capability for total control of an air space with a radius roughly equal to the distance from Washington, D. C. to Pittsburgh, Pennsylvania. AEGIS is a system carefully tested and

proven before production, whose costs were then cut nearly in half by competitive procurement. It is an outstanding success story of team play in the national defense.

QUESTION: Admiral, do you believe it would be in the National interest to buy additional AEGIS ships in 1989, if funds were available?

ANSWER: We have always maintained that 5-6 AEGIS ships per year are required to meet our minimum AAW ship force requirement. These 5-6 AEGIS ships per year are required to replace the aging DDG-37 and DDG-2 class ships. If funds were available in FY-89, it clearly would be in the Navy' best interest to buy the additional ships. Further, it would be more cost effective to buy those ships in FY-89 because a potential savings of from $175 million to $225 million could accrue by buying the additional ships now.

A-6F/G PROCUREMENT ISSUES

QUESTION: Mr. Secretary, last year the Congress provided conflicting guidance on the A-6 aircraft program. Can you tell us what your plans are for this program?

ANSWER: The Navy plans to procure A-6E/SWIP aircraft, restore long-standing logistics support/training deficiencies and continue A-6 upgrade development efforts with the $609.9 million FY 1988 APN-1 appropriation.

QUESTION: Does the Navy support remanufacturing the A-6E program through a competitive contract award?

ANSWER: Yes. The Navy would competitively bid a remanufacture program, if one is pursued.

QUESTION: When would this remanufacturing effort begin and when could these aircraft be delivered to the fleet?

ANSWER: The remanufacture effort could commence in early FY 1990 with deliveries of the first aircraft in FY 1992.

Force Structure Reductions

QUESTION: Mr. Secretary, the Navy is planning to retire 16 frigates this year to save operating dollars. How were these ships selected for retirement?

ANSWER: Not all of the 16 frigates will be retired this year. Eight will be retired in FY 1988 and 8 more in FY 1989. These ships were selected for retirement because of the age and limited capabilities of their weapons systems, their small steaming radius, their requirement for unique spare parts support and the historical difficulties that have been experienced in maintaining their pressured-fired boiler propulsion plants. Personnel manning and ship training requirements were also considered. Due to the age of their weapons systems and general lack of automation, these ships are manpower-intensive for their size and must be supported by a unique training pipeline and infrastructure that can be eliminated if they are retired. While there are still valid missions for these ships, they are not frontline battlegroup combatants and are the logical choice for retirement if force level reductions are required to meet present and future budgetary constraints.

QUESTION: Why were the 16 frigates chosen instead of the aircraft carrier, the Midway, which is twice the age of any of these vessels and significantly more expensive to operate?

ANSWER: While the Midway is older than the 16 frigates, her capabilities far exceed the collective warfighting abilities of these ships. Since neither the Garcia (FF 1040) or Brooke (FFG 1) class frigates are equipped with cruise missiles, their ability to deliver ordnance on targets at sea and over the shore is limited to the range of their World War II vintage 5"/38 caliber guns. Their anti-air warfare capabilities range from very limited, in the case of the Brooke class, to virtually non-existent on the Garcia class, which is not equipped with surface-to-air missiles. In contrast to the frigates, the Midway has been frequently modernized and upgraded over her many years of commissioned service and is presently equipped with the F/A-18 Hornet, the Navy's newest fighter and attack aircraft. With her embarked airwing, the Midway's multi-mission capabilities enable her to carry out long range strike operations against enemy shipping at sea and distant land based targets. Her anti-air warfare capabilities are extensive and second only to the U.S. Navy's larger carriers in terms of the ability to carry out multi-threat operations at sea. While Midway's hullform is old, her technology is not. She is superior to all other aircraft carriers that are presently operated by foreign navies.

In addition to her superior warfighting capabilities, there are many other reasons for retaining the Midway in active service and retiring the frigates. Included among these are:

a. In the absence of corresponding reductions to peacetime global carrier commitments, the loss of Midway would require that other carriers cover her commitments. In turn, they would be required to deploy for longer periods of time and can expect to experience the concommitant problems of safety and decreased retention that accompany the stressing of material and personnel beyond prudent limits. Based on political events of the past ten years, no reduction in the Navy's forward deployed carrier commitments are envisioned. In contrast to the Midway, none of the frigates to be retired are presently tethered to hard and fast geo-political commitments. Due to their limited capabilities, they rarely deploy with CV battlegroups and are primarily used for miscellaneous missions such as drug operations, non-battlegroup ASW missions, and opposition forces in fleet exercises. Absorbing the present commitments of these ships among remaining frigates would have far less of an impact on Navy personnel than the requirement to reassign Midway's commitments to other carriers.

b. The Midway has been homeported in Japan since 1973 and her retirement would require the relocation of some 5,000 personnel and their families from Japan to other areas of the world. In contrast, all of the frigates are homeported in the continental U.S. and Hawaii, where substantial PCS cost savings can be achieved through the reassignment of most personnel to other commands within their homeport.

c. The retirement of the Midway has significant foreign policy implications while the retirement of the frigates does not. The homeporting of Midway in Japan was an important National Security Council policy decision that was intended as a symbol to demonstrate U.S. resolve to remain a Pacific power. The retirement of Midway without replacing her with another carrier in Japan could result in a loss of confidence in U.S. resolve by Japan, Korea, and the Philippines to remain a credible military power in the Western Pacific.

The requirement to sustain tactical maritime air superiority in a conventional global war or regional conflict is paramount. Because of this the Navy, Joint Chiefs of Staff and Secretary of Defense have repeatedly stated the need for a minimum force of 15 deployable carriers to execute the nation's maritime strategy and national policy objectives. This requirement remains valid. It has recieved extensive study and analysis and represents a floor, not a ceiling, for the forces that are needed to reasonably meet our growing peacetime commitments and to successsfully execute the nation's global warfighting strategy. To retire the Midway in lieu of the 16 frigates is neither militarily or politically sound and will have a much more far reaching and adverse impact on Navy personnel. It is therefore considered an unacceptable budgetary alternative.

SSN-688 SUBMARINES

QUESTION: Mr. Secretary, I understand that there are large cost overruns in the SSN-688 submarine construction program. Can you describe the problems leading to this issue and identify how much the cost overruns are?

ANSWER: Both the Navy and the two SSN-688 submarine shipbuilders are projecting cost growth above contract target cost. Note that cost growth above shipbuilding contract target cost is not the same as a program budget overrun. Costs above target cost and below ceiling price are shared 50% by the government and 50% by the contractor. The 50/50 share is strong incentive for the contractor to contain and reduce the cost of construction as the submarines are built over the five- to six-year construction period. Costs in excess of the ceiling price are borne 100% by the contractors.

The contractor's estimated cost growth above target cost is about $0.77 billion for the 23 SSN-688 submarines appropriated from FY80 through 87. The government share is less than 3% of the total program end-cost for these submarines based on contractor estimates. Our more conservative internal estimates indicate the above contract target cost growth could be higher than the contractor's estimates. The government's share would be about 4% of the total end-cost if our more conservative estimate becomes reality over the next five to six years.

The Navy is continuing to obtain and review cost growth information. These cost growths above target cost for the 688 program are the result of aggressively bid target cost, unrealized productivity improvements and changes associated with added capabilities. In spite of cost sharing above target costs, the Navy is still obtaining these ships at lower costs than if competition did not exist.

As a point of reference, these modest costs on submarines pale in comparision to cost savings overall in Navy shipbuilding. For Navy shipbuilding programs in the private sector since FY 1983, savings are better than $7 billion below the President's original budget requests for these programs.

QUESTION: Are you currently planning to request funds for cost overruns?

ANSWER: We do not plan to request additional funds but, based upon the completion of a Ship Cost Adjustment review in progress, we may request approval to reprogram existing funds.

QUESTION: Given the SSN-688 program has slipped by several months, I understand several submarines are more than a year behind schedule, has the Navy considered slipping production by one year to allow the shipbuilders to catch up?

ANSWER: No. There is an urgent need for these ships, and the planned profile is an effective way to continue production while retaining shipyard capability. We have an adequate industrial capability to build the planned ships. The shipbuilders are working to remove these delays.

QUESTION: Mr. Secretary, I understand one of the shipbuilders is reluctant to sign a contract for fiscal year 1988, because it believes the design specifications for weight cannot be met. Does the SSN-688 have a weight problem? If not, why is the shipbuilder reluctant to sign a contract?

ANSWER: Since delivery of the SSN-688 in 1976, the class has steadily been improved to meet the continually increasing Soviet threat. Additional war-fighting capabilities have been improved and current SSN-688s are faster and quieter, with improved sensors and greater firepower than earlier ships. These improvements have not been easily achieved.

Essentially all weight margin for potential future improvements has been expended and significant efforts have been required by both the shipbuilders and the Navy to make the most effective use of all potential and minimize all weight not directly contributing to warfighting. Several major components have already been redesigned to provide as much margin as possible. During this process shipbuilder's margin has also been reduced, with the concurrence of the shipbuilders. One shipbuilder has requested additional margin for FY88 ships, and the Navy is resolving this request.

All SSN-688s have and are predicted to have both adequate margin for shipbuilder allowance and adequate stability. Growth margin has essentially been expended — there is no room for additional major improvements. NAVSEA is continuing discussions on specific margin requirements and other issues with both shipbuilders prior to requesting Best and Final Offers.

SHIP MODERNIZATION

QUESTION: In amending the 1989 budget, why did the Navy choose to make large reductions in ship modernization?

ANSWER: The Navy was required to make a $12.2B reduction to its FY-89 TOA. More than $2B of this reduction was taken from the O&MN Appropriation of which ship modernization is a part. Delays in modernization were unavoidable given the magnitude of the required reductions. Choices had to be made in order to honor our stated principle of achieving an acceptable level of risk across the entire spectrum of the budget.

QUESTION: What are the Navy's priorities within the ship modernization program -- which ship alterations will be cut back or terminated in 1988?

ANSWER: All modernizations are prioritized annually. In accordance with Navy objectives, the emphasis shall be on combat capability in warships, primary mission systems in amphibious, mine warfare and auxiliary ships, and material conditions in all ships. Only mandatory items imposed by authorities outside DON and essential safety, reliability, and maintainability changes to existing installed equipment will receive higher priority. The eight priority levels are: (1) mandatory and safety; (2) reliability and maintainability - primary; (3) urgent combat/primary system; (4) routine combat/primary system; (5) reliability and maintainability - secondary; (6) urgent secondary mission area; (7) routine secondary mission area; (8) mission/reliability support. Navy sponsors are currently able to fund only priority levels one, two, and three. Those alterations in the remaining levels will be held for accomplishment in the future should funding become available.

QUESTION: How will these modernization reductions affect Navy shipyard personnel levels? Which shipyards will be impacted?

ANSWER: The modernization reductions will reduce the predicted number of mandays required to execute FY-88/89 depot level availabilities. Reduced alteration funding is currently being identified to specific hulls. Until that distribution is complete, it is difficult to assess the personnel impact on either the public or the private sector.

SUBMARINE SILENCING ALTERATION PROGRAMS

Question: What are the Navy's plans for RAST and SSN-637 silencing alteration programs?

Answer: The SSN-637 silencing alteration program installs Special Hull Treatment during overhauls and Electrical Power Conditioners during overhauls and shorter availabilities. Fiscal constraints have required cancellation of these alterations during FY-89.

SHIP MODERNIZATION/MAINTENANCE

QUESTION: What are the Navy's plans for RAST?

ANSWER: The Navy plans to backfit the RAST system on the two CG 47 class cruisers and the eight active fleet FFG 7 class frigates that did not receive RAST during new construction. All thirty-one DD 963 class destroyers will also be backfitted with the RAST system. Including new construction ships, the Navy will have 47 RAST equipped ships in 1988 and 95 RAST equipped ships by 1995.

QUESTION: What impact will the modernization reductions have on the Navy Supply System? Which procurement programs will be reduced in 1988 and 1989 based on the cutbacks in modernization funding?

ANSWER: The modernization reductions are not expected to have a significant impact on the Navy Supply System. End item equipments are financed in the procurement accounts so the major exposure facing the supply system is the loss of sales for material procured to support the outfitting of initial spare parts and material usage experienced during normal operation of this equipment. Spares typically associated with modernization programs represent a very small percentage of the Navy Supply System's business. It is unlikely that any measurable impact will be experienced by the Supply System by these reductions.

QUESTION: Please provide a status report on the New Threat Upgrade (NTU) program. How many NTU packages will be installed in 1989? Where does the Navy intend to do these upgrades? How many ships will be competed?

ANSWER: Five NTU packages will be installed in 1989. All five will be done on the West Coast with two assigned to Long Beach Naval Shipyard and three competed. This current plan is subject to changes caused by fleet scheduling commitments or budgetary reductions.

QUESTION: Overhauls have decreased rapidly during the past few years as the Navy has moved to short-term maintenance packages. Does the Navy estimate that overhauls will increase in the early 1990s? If so, to what level?

ANSWER: In general, the Navy does not plan to increase the number of overhauls and will continue to rely on shorter duration depot level availabilities. This approach is necessary to increase the operational time available to the Fleet, and is proving successful as we see the number of scheduled overhauls declining through the early 1990's. However, this maintenance philosophy will not forestall the need for major overhauls on some of our complex surface combatants and nuclear submarines. Several ships will be coming due for complex overhauls in the mid 1990's, particularly nuclear ship work.

During FY-87, 44 overhauls were conducted on Navy ships. This number will drop to 28 in FY-88 and 24 in FY-89. The early 1990's will see a similar decline followed by an increase as our newer ships come due for ROH.

QUESTION: How will the Navy reschedule workload for Charleston Naval Shipyard to adjust for the decision to deactivate, rather than overhaul, the SSBN 619 (as required in the 1988 Continuing Resolution)?

ANSWER: The FY 88 Department of Defense appropriations legislation enacted on December 22, 1987, recommended that actions be taken to alleviated manpower reductions and disruption in workload scheduling at Charleston Naval Shipyard resulting from the deactivation of the SSBN 619. Accordingly, in addition to the SSBN 619 inactivation availability, several small availabilities have been assigned to CNSY. Those are AS 40, SSBN 625, SSBN 644 and FF 1098. The shipyard will also now execute three availabilities which were assigned at the May 1987 Fleet Scheduling Conference but could not have been performed if the SSBN 619 overhaul had been awarded. Those are AS 18, DDG 18 and FFG 49.

Additionally, CNSY plans to bid on FY 89 and 90 submarine availabilities - Extend Refit Periods (ERPs). Encouragingly, CNSY has proven itself highly successful in the public/private competition arena. The award of some of these availabilities, in addition to those assigned since cancellation of the SSBN 619 overhaul, should provide equitable compensation for the loss of the overhaul.

PUBLIC PRIVATE COMPETITION

QUESTION: Please provide a brief status report of the Navy's aircraft public/private competition program. How long does it take (and cost) to prepare bid specifications and other administrative work required to conduct the competitions?

ANSWER: Public/private competitions for aircraft overhaul, repair and modification are conducted under the routine guidelines and procedures established by the Federal Acquisition Regulations for competitive procurements of major weapon systems. Normal administrative lead time from development of initial acquisition plans through contract award is approximately 18 months assuming a moderately complex program. Costs for preparation of bid specifications, statements of work, requests for quotations, evaluation of proposals, source selection, and award of contracts are not routinely accounted separately for each procurement; such costs are a normal part of conducting acquisition and procurement business and are reflected in the Navy's operating and manpower budgets. The first two aircraft competitions, F-14 standard depot level maintenance and the P-3 Update III modification programs, are in process and bids from both public and private offerors are under evaluation. Contracts are expected to be awarded in the May-June, 1988 timeframe.

QUESTION (a): Please provide a brief status report of the Navy's ship public/private competition program.

ANSWER: As of 31 March 1988, the status of ship public/private competition is as follows:

Type of Availability	Number of Availabilities	Private Won	Public Won
FY 1985			
ROH	1	1	0
FY 1986			
ROH	9	5	4
SRA	3	1	2
TOTAL	12	6	6
FY 1987			
ROH	6	3	3
ERP	1	0	1
DSRA	5	2	3
PMA	3	3	0
TOTAL	15	8	7
FY 1988			
ROH	5 *	3	0
ERP	2	2	0
DSRA	8 **	1	5
SRA	4 ***	2	0
TOTAL	19	8	5

*Two not yet awarded/assigned
**Two not yet awarded/assigned
***Two not yet awarded/assigned

GRAND TOTAL	47 *	23	18

*6 pending award/assignment
ROH - REGULAR OVERHAUL
ERP - EXTENDED REFIT PERIOD
DSRA - DOCKING SELECTED RESTRICTED AVAILABILITY
SRA - SELECTED RESTRICTED AVAILABILITY
PMA - PHASED MAINTENANCE AVAILABILITY

QUESTION (b): How long does it take (and cost) to prepare bid specifications and other administrative work required to conduct the competitions?

ANSWER: The costs and time required to prepare the bid specifications and other administrative work depends, among other factors, on the class ship, the type of availability involved and the Source Selection process used. As an example, the following costs and time periods used to prepare bid specifications are provided:

Class	Availability	Average Time	Average Costs
DD 963/DDG 993	ROH	14 months	$300,000
FF 1052	ROH	8 months	425,000
FF 1052	SRA	5 months	203,000
FFG-7	SRA	5 months	203,000

Once the bid specifications are prepared and ready to issue, an average of 4 months is required to process the solicitation and to make the award. The cost for this administrative work cannot be accurately determined because of the many factors that impact upon the procurement. (i.e., Source Selection method used, number of changes involved, number of bidder's question received, type of pre-award survey performed, etc.)

The difference between a public vs private competition and a normal private sector competition in terms of time and money, is that public vs private competitions require a cost comparability review before an award is made. The cost of this review, however, is minimal.

QUESTION (c): Why isn't the Navy increasing the number of hulls competed?

ANSWER: The number of hulls being competed has increased some what. In FY 86 we competed 12, in FY 87 we competed 15, and in FY 88 we are competing 19. The Navy considers 10% of the total maintenance and modernization dollar value to be about the right proportion, due to the type of work amenable to this competition and the need to maintain Naval shipyard core workload.

QUESTION: The General Accounting Office (GAO) took exception to the Navy's claim that $200 million has been saved through public/private competition. For 1985, 1986, 1987, and 1988 please provide savings attributed to this program.

ANSWER: The GAO evaluated the $200 million estimate and found that it does not take into account a number of cost reduction efforts in the shipyards which may have also created cost savings. The Navy maintains that while the efficiencies achieved through implementation of various initiatives affect the accuracy of the $200 million estimate of savings, it is a reasonable figure. By comparing the difference between the award price of the winning public shipyards and the low private offerers, we can demonstrate a difference (savings) well over $200 million. The primary benefit of public/private competition has been efficiency improvements in the public shipyards and to show that Naval shipyards can compete effectively with similar highly capitalized shipyards.

Question: If the Navy supports public/private competition, why does the President's Budget propose that the language permitting competition be removed from the FY 1989 appropriation? Can the competitions be performed without this language?

Answer: The Navy's support for private/public competition is inconsistent with the firmly held policies of OMB Circular A-76. OMB will not approve language that officially supports an exception to their basic policies. The Navy cannot compete overhauls public/private without the exemptions from OMB Circular A-76.

Persian Gulf Operations

QUESTION: We understand that the cost of Navy operations in the Persian Gulf has decreased based on the mix and number of ships [deleted]. Could you please describe these changes and your current cost estimate?

ANSWER: The Navy was able to reduce the incremental cost of Persian Gulf and North Arabian Sea operations by the following actions:

a. The Navy reevaluted the threat in the area of operations and with the concurrence of JCS reduced the forces involved in the operations by six vessels.

b. The cost of resupply was dramatically lowered when the

Navy was able to shift from air to sea. The cost of shipping supplies to the Area of Operations was reduced from $1.65 to $0.10 per pound by shifting from airlift to sealift.

c. The Navy changed its method of mine sweeping from the helicopter to ship, and rotated the helicopter mine sweeping squadron back to the United States.

d. The Navy, based on the threat, changed its policy of providing continuous airborne carrier aircraft to support the convoy operations. Our policy now is to provide ready alert aircraft on the carrier during convoy operations which has reduced the aircraft operating costs.

The Navy estimates the incremental costs will be between $130 to $150 million.

QUESTION: We understand that the Navy's 1989 budget does not contain funds for continuing Persian Gulf operations. How will the Navy finance operations if this mission continues in 1989.

ANSWER: If the Persian Gulf operations continue into FY 1989, the Navy will finance the mission by further reducing other Navy programs and commitments. The programs which would be reduced will not be determined until late in FY 1989.

STARK

QUESTION: Please list the items (by appropriation) that the Navy will procure/is procuring with funds added by Congress in 1988 for improvements recommended following the STARK incident. What changes have been made in combat system or firefighting training since the incident?

ANSWER: FY-88 defense appropriations included $22 million in Other Procurement, Navy (OPN) and $38 million in Operation and Maintenance, Navy (O&MN) appropriations for the purchase and support of firefighting and damage control equipment for Fleet ships.

Table 1 lists planned quantities and cost of equipment by appropriation to be procured. Exact quantities to be procured will depend on the price of future contracts and therefore can only be estimated at this time. It is expected that all funds will be obligated this fiscal year and delivery to the Fleet will be accomplished by the end of fiscal year 1989.

In addition to the $56 million equipment procurement listed in Table 1, $4 million was allocated to provide survivability engineering and logistic support.

A coordinated effort is underway to ensure that improved or new training methods and curricula are implemented where necessary to supplement the delivery of new/additional damage control/firefighting (DC/FF) equipment to the Fleet. In addition, a comprehensive review of DC/FF training is being conducted by the CNO's Technical Assessment and Coordination Team (TACT) to improve organizational structure and training methodologies. The procurement of new firefighting trainers (modular equipment) will provide Fleet Training Units with more realistic conditions for training firefighters.

New training for firefighters will be developed in conjunction with the implementation of new doctrine/procedures for fighting missile fuel fires. Also, new training will be implemented for personnel to handle recently procured DC/FF items such as the Naval Firefighter's Thermal Imager (NFTI), Exothermic Cutting Torch, and non-sparking cutting/extraction devices.

Some areas of firefighting training will be modified as a result of th~ STARK incident. For example, OBA training will require all personnel to wear an OBA for a full hour instead of the previously required 20 to 30 minutes. Personnel will be taught techniques for avoiding electric shock from severed electrical cables.

Longstanding requirements for shipboard personnel will be reinforced to ensure high level of firefighting qualification on all ships. All personnel will be required to qualify as lead hoseman on a firefighting team within six months of reporting aboard ship. Aviation personnel, who are all trained in live firefighting curricula, will be integrated into shipboard training plans and programs. Shipboard training will include use of the Emergency Escape Breathing Device (EEBD), and periodic drills will be conducted to teach personnel egress techniques from smoke-filled spaces.

TABLE 1. LIST OF DAMAGE CONTROL AND FIREFIGHTING EQUIPMENT BEING PURCHASED WITH $60M ADDITIONAL AUTHORIZATION

ITEM	TOTAL QUANTITY BEING PROCURED	ALLOCATION PLAN	COST ($M)
APPROPRIATION (OP,N):			
NAVAL FIREFIGHTER'S THERMAL IMAGER (NFTI)	800 (approx.)	FILL NEW ALLOWANCE OF A MINIMUM OF 2 NFTIs PER SHIP	10.0
DAMAGE CONTROL WIRE FREE COMMUNICATIONS	99 Ship Sets	INSTALL INTERIM DC WIFCOM ON 99 ADDITIONAL (TOTAL OF 130) SURFACE COMBATANT SHIPS	12.0
APPROPRIATION (O&MN)			
ADDITIONAL OBAs	7000	FILL NEW ALLOWANCE OF 6 OBAs PER REPAIR LOCKER	7.0
OBA CANISTERS	100,000	FILL NEW ALLOWANCE OF 12 CANISTERS PER OBA	3.0
SMOKE CURTAINS AND BLANKETS	6000 each (approx)	3 BLANKETS AND 3 CURTAINS PER REPAIR LOCKER	5.0
EXOTHERMIC CUTTER	1000 (approx.)	ONE PER REPAIR LOCKER	3.0
NON-SPARKING MECHANICAL EMERGENCY EXTRACTION EQUIPMENT	600 (approx.)	ONE PER SHIP	3.0
HIGH CAPACITY SMOKE REMOVAL BLOWERS	2000 (approx.)	ONE PER REPAIR LOCKER	2.5
IMPROVED DAMAGE CONTROL HELMET	24000 (approx.)	18 PER REPAIR LOCKER	1.5
HELMET LIGHTS	36000 (approx.)	18 PER REPAIR LOCKER	1.0
FIREFIGHTER'S RUBBER HIP BOOTS	6000 (approx.)	3 PER REPAIR LOCKER	1.0
SELF-LUMINESCENT PAINT AND STENCILS KITS	1700 (approx.)	VARIES ACCORDING TO SHIP TYPE	3.0
P-250 MODEL JP5 CONVERSION KIT	5000 (approx.)	ONE MODIFICATION KIT FOR EACH PUMP ONBOARD	4.0
		TOTAL	56.0

AIRCRAFT MAINTENANCE/SUPPORT

QUESTION: The FY 1989 budget proposes a significant reduction in logistics and engineering support. Please explain specifically how this reduction will be accomplished.

ANSWER: The change between FY 1988 and FY 1989 will be accomplished by reducing efforts in a multitude of programs. Examples of programs that will be affected by the decrease are as follows:

Air Traffic Control

Scheduled installation of Air Traffic control equipment will not occur.

Range Support

Support will be reduced at Pacific Missile Range Facility, installation of a Range Computer will not be completed, and acceptance testing at two ranges will be delayed.

NALCOMIS

Decreases the number of NALCOMIS sites implemented, slippage of NALCOMIS training and software maintenance.

NUCLEAR WEAPONS SAFETY

Reduce level of effort for basic design engineering support of nuclear certification of aircraft. Two of the six nuclear weapons safety studies will be canceled in FY 1989 and planning for the FY 1990 studies will be delayed one year.

EMI

Decrease in aircraft electromagnetic environmental effects evaluations and support. Air Systems deploying advance state-of-the-art technology will not be hardened against EMI.

CATAPULTS AND ARRESTING GEAR

Navy's ability to maintain minimum fleet problem response/in-service engineering support will be reduced.

ENGINEERING SERVICES

Basic Design Engineering services will be reduced. Follow-on test and evaluation for modifications to selected missile systems will be delayed, slowing introduction of these modifications.

FEWSG/TEMP

Three specially equipped jamming aircraft are operated and maintained under this program. Aircraft operations will be reduced, critical aircraft equipment maintenance will not occur, and software support for these aircraft will be terminated.

AVIATION TRAINING

Question: Why does the Marine Corps need to fly 22 hours per crew per month rather than 19 hours like the Air Force?

Answer: The primary mission of Marine aviation is to participate as the supporting air component of a Fleet Marine Force in the seizure and defense of advanced naval bases and for the conduct of such land operations as may be essential to the prosecution of a naval campaign. As such, Marine aviation is organized, trained, and equipped as a completely expeditionary air arm. This aspect sets Marine aviation apart from other aviation organizations, and dictates that we must be prepared to provide this support by operating tactical aircraft squadrons from aircraft carriers (CVs, LPAs, LHAs, LHDs) or from airfields within striking distance of an amphibious objective area.

Due to the level of proficiency required to operate tactically in a shipboard day/night, all-weather environment, a significant portion of TACAIR training hours (in addition to those utilized for achieving and maintaining combat readiness in primary mission areas) are expended on preparation for shipboard embarkation as well as embarked operations. These missions are described in detail and specifically tasked in the training and readiness manual for each aircraft in the inventory. Integral to the syllabus for each carrier capable aircraft is the incremental training necessary for carrier proficiency. This is necessary to accommodate the basing strategy which is a result of the mission of the Marine Corps. The tactical Marine aircraft which currently deploy aboard ship are: AV-8B, F/A-18, A-6E, CH-46E, CH-53, AH-1 and UH-1. In FY89, these aircraft will account for approximately 80% of Marine tactical aircraft forces.

It should be noted that the full spectrum of operational commitments does not require the assignment of all carrier-capable forces to the ship deployment cycle simultaneously. Satisfying this requirement, in addition to satisfying our WESTPAC unit deployment and CONUS commitments, may only require that approximately 30% of capable forces be in the active cycle at any given time.

QUESTION: Please provide a status report on the helicopter training report requested in the committee's 1988 report (page 75).

ANSWER: The research, which included fact finding visits to Army helicopter training sites, and the cost and manpower analysis are complete. The report is currently being drafted, and the completed report is expected to be submitted on time. (15 June 1988)

QUESTION: Why do Navy and Marine Corps helicopter pilots need to be trained as fixed wing pilots first?

ANSWER: Initial Navy/Marine Coprs undergraduate pilot flight training commences with training in the T-34 aircraft. Initial fixed wing training provides the two services the capability to assess students' aeronautical adaptability and potential under common training conditions; thus allowing the services to distribute talent and qualifications to specific pipelines in accordance with service needs. Predetermination of training pipeline prior to aviation indoctrination would derogate the service's ability to distribute talent and could result in higher attrition in some pipelines and attendant increased costs. Furthermore, basic instrument flying skills are developed in the T-34C aircraft prior to advancing to the more expensive cost per flight hour TH-57 helicopter. Development of these skills in fixed wing aircraft form the basic building blocks of helicopter instrument training. Additionally, helicopter pilots provide a large percentage (approximately 37%) of the fixed wing instructor pilots for initial fixed wing training. Without this source of trained fixed wing instructors, the Navy would be hard pressed to man the training command instructor billets.

QUESTION: How many of these pilots transition back to a fixed wing aircraft?

ANSWER: Only 14 pilots have permanently transitioned from helicopters to fixed wing aircraft in the last 12 years. However, as indicated above, helicopter pilots provide an invaluable source of fixed wing instructors for primary flight training.

QUESTION: Please provide the Navy and Marine Corps undergraduate pilot induction and graduation statistics for 1985, 1986, 1987, 1988 and 1989 est.

ANSWER: The undergraduate pilot induction and graduation statistics are: (Note: Pilots inducted in FY-85 were graduated in FY-86 and FY-87. Those inducted in FY-86 were graduated in FY-87 and 88. etc.)

(USN/USMC)

PIPELINE	FY-85	FY-86	FY-87	FY-88	FY-89
INDUCTION	1890/272	2163/384	1837/446	1243/413	*
GRADUATION					
Strike	304/120	355/105	367/103	340/109**	341/109**
Maritime	239/15	270/10	260/26	282/26**	285/26**
E-2/C-2	60/0	54/0	65/0	58/0**	63/0**
Rotary	256/250	310/220	345/193	367/193**	402/193**

* Under development.

** Projected pilot training rates.

QUESTION: Also provide pilot attrition rates.

ANSWER: The attrition statistics (PERCENT) by pipeline are:

(USN/USMC)

PIPELINE	FY-85	FY-86	FY-87	FY-88 (to date)
PRIMARY	11.7/13.9	9.7/7.3	6.3/8.0	10.0/8.2
INTERMEDIATE T-34	1.0/1.5	1.0/0.6	.5/0	1.6/3.1
ADVANCED MARITIME	3.5/3.6	2.9/0	.8/3.7	2.0/0
ADVANCED ROTARY	4.7/4.1	2.5/4.6	3.6/1.5	7.2/1.2
INTERMEDIATE STRIKE	5.7/6.7	3.9/1.1	6.7/5.6	6.7/11.4
ADVANCED STRIKE	7.5/8.4	3.3/2.8	6.3/8.0	16.9/10.7
E-2/C-2 T-2	4.3	12.2	8.6	13.8
E-2/C-2 T-44	12.5	0	0	0

QUESTION: How many more pilots could the current training base produce?

ANSWER: The current undergraduate pilot training base is capable of supporting some additional training requirements. Making the assumptions that additional flight hour funding and additional instructor pilots are made available, the existing trainer aircraft inventory could support the following additional pilot training requirements.

PIPELINE	ADDITIONAL PILOT TRAINING CAPACITY
Strike	+59
Maritime	+ 2
Rotary	+53

Increased production could not begin until FY-89 because students graduating in FY-88 have already been inducted into training.

CIVILIAN PERSONNEL

QUESTION: How does the Navy intend to implement the civilian personnel reductions contained in the budget?

ANSWER: The reduced civilian estimates in the amended budget, which have been established in balance with the reduced program funding levels resulting from the Budget Summit Agreement, represent the manpower levels which are required to accomplish the remaining funded program. The reduced manpower figures also reflect a concerted effort to contain personnel costs by aggressively pursuing manpower economies and efficiencies. It is anticipated that most of the personnel drawdown can be accommodated through attrition. The Department of the Navy has no plans to conduct major across-the-board reductions-in-force (RIF), furloughs, or freezes of civilian employees. Based on their discrete funding and workload situations, however, individual activity commanders may seek limited authority to conduct RIF's, furloughs, or early outs. Likewise, local activity commanders may elect to restrict hiring as necessary.

QUESTION: How will these reductions be spread?
ANSWER: The reductions in manpower resource levels have been spread in balance with reduced program funding levels in order to assure that the remaining manpower is available to accomplish the funded workload represented in the Department's budget estimates.

QUESTION: How does the decision to reduce civilian personnel relate/mesh with the Navy's manage to payroll program?
ANSWER: The civilian compensation estimates in the amended submission are a function of the estimated work years and end-strength required to execute the reduced budget program levels. In executing the budget, our line managers are not constrained to the work year or end-strength estimates, and they are given the flexibility to structure their work force within the payroll allocation. This approach allows the line manager to responsibly manage his civilian positions and grade structure, while encouraging the achievement of efficiencies. Because of the dynamic Department of the Navy workload, a mechanism also exists for activities and major executing commands to obtain additional payroll authority when warranted, thus assuring that deviations from the original payroll estimates can be fully explained in program terms.

INDUSTRIAL FUNDS

QUESTION: Why should the R&D labs be funded through the industrial fund rather than through direct appropriations?

ANSWER: As indicated in the budget, the Department of the Navy is in the process of removing the R&D laboratories from the industrial fund starting in FY 1990.

The Navy Industrial Fund (NIF) was adopted for the major Navy Research and Development (R&D) Centers (labs) in the mid 1960's. The system served the Navy well over this period of time. Unlike the majority of R&D labs in the other Services, Navy R&D Centers are tasked to perform effort across the full spectrum of research and development from basic and applied research through exploratory development to full scale engineering development, test, evaluations, and in many cases production and fleet operational support. Their customer base is very broad and encompasses work within their specific mission areas from many program offices and systems commands. As a group, the major Navy R&D labs have as many as 12,000 taskings at any one time. The industrial fund system with its inherent "buyer-seller" relationship enhances the communication process between the performing lab and its direct program customers and allows the lab to focus on technical performance within the customers' specifications and funding envelope similar to commercial practice.

Based upon an OSD review conducted over the past two years, OSD determined that the labs present a unique situation relative to financing research functions as industrial fund activities. OSD stated that difficulties stem from problems in measuring output as well as the inapplicability of, and the lack of specific benefits from, DoD's rate stabilization policies. Additional problems stem from prohibitions against allotment-type accounting and multicustomer orders which are desired for many research efforts. Additional costs are due, in part, to requirements of appropriated fund customers for information which is not required for industrial fund operations. Accordingly, OSD determined that the correct course of action is to remove the research activities from the NIF.

MK-46 Torpedo Program

QUESTION: Mr. Secretary, why has the Navy continued to ignore the Congressional direction on the MK-46 torpedo program?

ANSWER: When the Multi-year II contract was awarded in FY 1987, a valid requirement existed to procure MK-46 torpedoes as specified in the contract. However, two factors subsequently combined which required the Navy to re-evaluate the procurement of additional MK-46 torpedoes in FY 1988. The first factor was the fiscal constraints in the developing FY 1988 budget, which resulted in the decision to cancel the FY 1988 buy for affordability reasons attendant with a concern to direct available resources to the more capable MK-50 torpedo.

The second factor, concurrent with the cancellation of the last year of the Multi-year II contract, was the increase in available MK-46 assets. This increase resulted primarily from a combination of improved maintenance practices and fewer than expected losses of exercise torpedoes, which provided additional ready-for-issue torpedoes to the fleet.

Available MK-46 torpedo assets have **[deleted]** **[deleted]** **[deleted]**. Available assets at the end of FY 1989 will equal 116% of the MK-46 inventory objective.

With these considerations in mind, the Navy is actively pursuing all avenues to comply with Congressional direction. We are attempting to procure MK-46 torpedoes under the Foreign Military Sales program. It is anticipated that adequate foreign customer orders will be received to satisfy the last year procurement requirement. It is our desire to procure these torpedoes using Special Defense Acquisition funds (SDAF) to conserve our limited weapons procurement funds.

Regarding the spares issue, the Navy is currently investigating a means by which we can more effectively procure spares. This is especially true of critical spares. The result will be higher asset readiness levels and reduced inventory backlogs at intermediate maintenance activities and depots.

QUESTION: How much MK-46 torpedo money is still unobligated from the FY 1987 and FY 1988 programs?

ANSWER: Accounting for FY 1987, there is currently $20,469,000 unobligated for torpedo procurement. Of this amount, approximately $12,000,000 is required for torpedo acceptance tests, quality assurance inspections, and contract termination liability. There is currently $18,243,000 unobligated for procurement of MK-46 torpedo modification kits. Of this amount, approximately $14,000,000 is required for acceptance tests, quality assurance inspections and contract termination liability.

According for FY 1988, upon cancellation of the last year buy of the Multi-year II contract, the Navy deleted this requirement from its budget prior to submission to the Congress.

QUESTION: With the changes in the MK-50 torpedo acquisition schedule, has the Navy reconsidered its opposition to continued production of the MK-46?

ANSWER: As mentioned earlier, MK-46 inventory levels have been increasing as a result of improved maintenance practices and fewer than expected losses of exercise torpedoes. This coupled with planned ship retirements results in a decision that current MK-46 inventories and projected MK-50 procurements will satisfy the projected inventory requirement.

AIM-54C PHOENIX MISSILE

The Navy is accepting incomplete and unusable AIM-54C Phoenix missiles from the prime contractor because of the failure of a Government-furnished part. The FSU-10 safe and arm device has yet to be fixed by the contractor. All missiles accepted by the Navy must be put in bunkers until a new FSU-10 can be qualified. This issue has been going on for almost two years.

QUESTION: Mr. Secretary, what is the status of the fix for the Phoenix missile's safe and arm device, the FSU-10?

ANSWER: The fixes for the FSU-10 have been identified, production has resumed, and the AIM-54C missiles in bunkers will all be deployed in 1989.

While it is true that there have been problems with the FSU-10 for almost two years, these were two unrelated problems which appeared one year apart. The first problem, discovered in April 1986, was a design deficiency which, if left uncorrected, could have resulted in hot gas leakage from the FSU-10 and possible rocket motor failure after launch. This problem was corrected. Units incorporating the change have successfully completed testing, and production resumed early in 1987. During FSU-10 production lot acceptance testing in April 1987 an abnormally high failure rate was experienced. Upon investigation we determined that several problems with the FSU-10 design, the contractor's manufacturing practices and acceptance test equipment were contributing to the high failure rate. The units could be manufactured, but were difficult to produce at rate. It was decided that the AIM-54C would not be deployed with these units.

Since June 1987 the Navy has worked with the contractor to change the design where necessary to improve the producibility of the FSU-10. In addition, there has been a significant change in the contractor's organization and staffing level. Specific responsibilities have been identified, and quality, configuration management, and production control programs have been established. Assembly instructions have been revised, changes are controlled and compliance with the instructions is strictly enforced. Test equipment has been improved and now produces repeatable, reliable results. Production resumed in February 1988 with rates of 10 to 15 units per week being realized. The first phase of testing has been completed with no failures. The production rate is planned to increase to 25 per week in May 1988. Production lot acceptance testing will be completed in May, and missiles will be delivered to the Fleet with FSU-10's installed beginning in June 1988.

QUESTION: Is it true the Navy has rejected a proposed redesign by the prime contractor to fix the problem with the Government-furnished part? Why did the Navy make this decision?

ANSWER: After the Navy announced its intention to make the FSU-10 a prime contractor-furnished part in fiscal year 1989, Hughes Aircraft proposed a totally new safe and arm device concept as an alternative to the FSU-10. The Navy assessed this proposal to be a high schedule risk and to have large undetermined costs related to test and evaluation of the new device. Since FSU-10 production had already resumed, and preliminary test results were encouraging, the Navy decided not to pursue the proposed alternative concept.

STOCK FUND AUGMENTATION

QUESTION: The Navy's amended 1989 budget significantly reduced inventory augmentation requirements for the stock fund. Please explain the rationale for this decision.

ANSWER: The Navy's Amended FY 1989 budget request was based upon the agreements reached in the Bipartisan Budget Summit agreement. The fiscal impact of this agreement reduced the Department's FY 1989 budget by eight percent from the program which was presented to Congress a year ago. Since there was no single, easy solution to accommodate resource reductions of this magnitude, the entire spectrum of the budget was examined in an attempt to arrive at reductions which would create, in any area, no more than an acceptable level of risk. The Inventory Augmentation requirement was just one of the many elements that was examined in this overall strategy. The reductions made were judged to be necessary for the Department to formulate a balanced program and do not represent more than an acceptable level of risk.

AIRCRAFT MAINTENANCE/SUPPORT

QUESTION: What types of aircraft and items constitute the Navy's maintenance backlog?

ANSWER: The Navy's aircraft rework maintenance backlog covers almost the entire range of aircraft in the current Navy inventory, e.g., fighter, attack, cargo, trainer, patrol, helicopters, and utility-type aircraft.

Other items that comprise the aircraft maintenance support backlog include various types of engines, installation of modification kits, and interim support of components. The backlog for these programs basically covers the same range of naval aircraft types listed above.

There are also programs that are not directly related to certain types of aircraft that have maintenance backlogs. Several examples include the calibration program, which performs the calibration and repair to the Navy's aviation systems so the equipment operates within allowable standards; the support equipment program for "yellow gear" equipment such as tow tractors, fire trucks, engine stands, etc., that are necessary for day-to-day maintenance of operations for Navy's aircraft; and the air-launched missile and ordnance rework program identified by missile or ordnance type. Most aircraft are capable of utilizing various missiles or ordnance depending upon the mission.

QUESTION: How much difference on readiness has "stock funding" aviation and ship depot level repairables made (please be specific)? What difference has it made in the cost of these items? How much is requested in 1988 and 1989 for DLR's?

ANSWER: Fleet readiness has improved dramatically over the past several years and without question, "stock funding" of Depot Level Repairable has been one of the major influences in achieving this state of readiness. These gains realized are the result of a number of programs and factors that coalesced in the early 1980's to elevate readiness to today's levels. Among those factors were, higher retention of highly qualified, trained personnel, upgraded training, acquisition of state-of-the-art test equipment, better hardware documentation and engineering analysis, enhanced logistic support models as well as full funding in the Operations and Maintenance account. Just how much any one of these, individually, have discretely improved readiness is impossible to measure. What can be stated is that "stock funding" of DLRs has been one of the critical and important elements in this effort.

The cost for Depot Level Repairable has decreased by 23.9% over the past five years. While these savings were realized during the time frame that DLRs have been "stock funded," that mere fact is not the sole or principle reason for those savings. The Navy, in implementing the Secretary of Defense's Ten Point Program to increase competition and reduce the cost of spare parts, instituted Project BOSS (Buy Our Spares Smart). This initiative is a multifaceted program to improve the acquisition of spare parts. It touches all phases of material support from who uses and purchases them to those who control the material. The principle savings realized in purchase cost of DLRs reflect the Supply System's implementation of the various programs under the overall initiative of Project BOSS. To this regard, the Navy Stock Fund has requested $2,863.7 and $2,489.8 million in contract authority for the procurement and repair of Depot Level Repairable in FY 1988 and FY 1989, respectively.

AIM-54C PHOENIX MISSILE

QUESTION: How many incomplete Phoenix missiles did the Navy accept in fiscal year 1987?
ANSWER: The Navy accepted 310 missiles in fiscal year 1987 without FSU-10's installed.

QUESTION: How many AIM-54C's were delivered to the fleet in fiscal year 1987?
ANSWER: There were 135 serviceable AIM-54C missiles delivered in fiscal year 1987. Of these, 11 were assigned to test and evaluation, and the remaining 124 were delivered to the fleet.

QUESTION: What is the current total of non-operational AIM-54C missiles waiting for parts?
ANSWER: There are 552 AIM-54C missiles awaiting installation of the FSU-10. This installation can occur at a rate of 40-60 per month when FSU-10's are available beginning in June 1988.

QUESTION: How much money did the Navy pay the FSU-10 contractor in fiscal year 1987? How much has been paid in fiscal year 1988?
ANSWER: The FSU-10 contractor was paid $881,000 in fiscal year 1987, and has been paid $604,600 in fiscal year 1988.

QUESTION: What is the Navy's estimated cost to fix the FSU-10 problem? Will the contractor pick up any of this cost?
ANSWER: The Navy has placed several ceiling priced orders totalling approximately $5.3 million to incorporate all necessary corrective actions into about 1300 FSU-10's. The final cost will be negotiated downward from this amount. The prime contractor's liability is limited because the FSU-10 is a Government-furnished design.

QUESTION: The Committee has been told that the maximum production rate for the AIM-54C is currently 38 missiles per month because of limitation of test equipment for the guidance section. Is this an accurate statement? Does the Navy have any funds programmed in either fiscal year 1988 or 1989 for more test equipment? Does the Navy intend to produce beyond 38 missiles per month?
ANSWER: Hughes is tooled to a nominal production capacity of 40 missiles per month based on a work schedule of 2 shifts, 8-hour day, 5 days a week. The current contract delivery requirement is for 38 missiles per month, but in February 1988, Hughes delivered 40 AIM-54C missiles. In addition to Hughes' capacity, Raytheon is developing its facility to produce at a capacity of 30 per month. This provides an adequate production capacity for meaningful competitive procurement at the programmed 48 per month rate, and for mobilization. Each contractor also has the capacity for warranty repair of at least 10 missiles per month. Counting new production and repair deliveries, Hughes has demonstrated the capability to deliver 55 missiles per month. No funds are programmed for more test equipment.

600 SHIP NAVY

Question: Admiral Trost, the subcommittee has received differing estimates as to when the 600-ship Navy will be achieved, based on the amended budget, compared with the 1989-1990 dates under the original budget. DOD's Comptroller, Assistant Secretary Bob Helm, has said the delay will only be until 1992. The Navy has been less precise. Admiral, do you agree with the Assistant Defense Secretary, and if not, when will the 600-ship Navy be achieved?

Answer: Original projections have been revised due to ship delivery schedule changes. The current projection for 1992 is (d) ships. Under the currently approved shipbuilding plan, we will attain a sustainable 600-ship Navy in the late 1990's.

DRAGON III

Question: General Gray, have the requirements for an interim medium anti-tank missile system been agreed to by OSD, the Army, and the Marine Corps?

Answer: No, we do not have a requirement for an "interim" missile. The Army and the Marine Corps both require capable and affordable anti-tank missiles. Both Services are considering plans to buy Dragon III and AAWS-M as complementary systems.

Question: Is it true that the Army has offered to give the Marine Corps the first AAWS-M's off the production line, scheduled for delivery in 1992, which would eliminate the war reserve requirements problems the Marines will encounter as you continue to use the Dragon II for training?

Answer: Full production for AAWS-M missiles is now scheduled to begin in FY94. We need to resolve our war reserve shortfall before then.

Question: General Gray, the Committee is aware of information showing that the kill probability for the Dragon III is not any better than the kill probability of the Dragon II, the improved version of the Dragon now being fielded. Why shouldn't the Marines buy more Dragon II's than continue an expensive R&D program for the Dragon III?

Answer: I have prepared a chart showing the probability of kill for Dragon I, II, and III. (See the insert on page 71.) In all cases, Dragon III is far better than Dragon I. The data for Dragon II is, in some instances, marginally better than that shown for Dragon III. However, because we have had only three Dragon III shots (with precursor charge) to date, not all the data is in. We know the PK for Dragon III will improve when other factors are considered. I am referring specifically to the reduced time-of-flight (Dragon III reaches 1000M in 6.25 seconds, Dragon I and II each take over 11 seconds) and the stabilized line-of-flight modification that eliminates gunner flinch. The data also ignores improvements in PK that will result from the use of a precursor charge. We consider other factors as well. For instance, the reduced time-of-flight for Dragon III means greater gunner survivability... a factor measured in lives, not probabilities. Finally, Dragon II is a retrofit program. New production costs for Dragon II are forecast to compare to those for Dragon III. The benefits of Dragon III outweigh the costs.

Question: General Gray, the Marine case for Dragon III is based on a cost and operational effectiveness analysis comparing the single-shot kill probabilities and costs of the proposed Generation III Dragon with those of the basic Dragon, known as Generation I. Has a cost and operational effectiveness analysis been done which compares Dragon Generation III and Dragon Generation II?
Answer: Yes, see previous question.

Question: If not, shouldn't this type of comparison be done before proceeding with an expensive Dragon III R&D program?
Answer: Yes, see previous question.

MARINE CORPS - M1A1 TANK

Question: General Gray, your amended fiscal year 1989 budget shows a major reduction in the number of M1A1 tanks you wish to buy this year. Your original request called for the purchase of 66 tanks, your amended budget request was only 14 tanks. Why the major change in such an important system?
Answer: The number of M1A1 tanks was reduced from 66 to 14 tanks due to severe reduction to available resources. The scope of the cuts to the FY 89 budget between Presidential Budget 88 and the final Amended FY 88/89 Budget Submission forced a close look at all appropriations with a particular emphasis on large expensive programs. As the largest single Marine Corps program in recent years, the M1A1 was a prime candidate to help absorb the required cuts. Among other things, we reduced end strength by 2900 Marines and were forced to look closely at the affordability of the M1A1 for the Marine Corps. The quantity of 14 tanks in FY 89 is designed to provide us a training base to start the transition to the M1A1. Subsequent review of the M1A1 program reestablished its importance and we are taking steps to ensure the procurement profile provides a viable capability, albeit at a slower rate than desired.

Question: Has the total Marine requirement for the M1A1 changed since the last POM submission?
Answer: Yes, but the requirement for a robust armored combat force remains constant. In the process of reevaluating our need for the M1A1, along with a concurrent force structure study, and examination of how to best fulfill our national defense responsibilities with reduced resources, we determined that we could reduce the overall M1A1 tank requirement. Tank battalions were tailored to best suit their most likely contingency requirements, and the number of Maritime Prepositioning tanks were reduced. There has been no loss of overall armored capability, but we feel we have optimized our tank force structure, with the

new tank, to achieve the best mission/means match, with an eye to our most likely commitments, consistent with available resources. We originally planned to procure 560 M1A1 tanks, and to complete procurement by FY 1993. We now plan to procure only 397 M1A1 tanks, and will not buy our last M1A1 until 1996.

Question: The Marines have informed our staff that affordability is a key factor in the reduced requirements for the M1A1 tank. Hasn't your decision to reduce your buys in fiscal year 1989 and 1990 threatened the current multiyear contract and the ability of the Army to execute the terms of that contract?

Answer: Affordability was certainly a factor in fulfilling our armored combat requirements, but as I stated earlier we arrived at our final M1A1 numbers by analyzing our mission and the requirements for armor to complete those missions, and the capabilities of the M1A1 system. The Army's multiyear contract is in force and the Marine Corps changes have not jeopardized the execution of that contract.

Question: If the Army is forced to cancel the current M1A1 tank multiyear contract, won't the price per unit go up significantly for the Marine buy? How much do you estimate the price will increase?

Answer: If the Army should cancel the multiyear contract and we are forced to use a single year contract, we estimate that the unit cost will increase between 15 to 20 percent.

Navy Battle Group Air Defense Master Plan

Question: Admiral Trost, the Navy is preparing a master plan for the programs and operational concepts needed for air defense of battle groups in the future. This master plan reportedly will establish funding priorities for R&D and procurement programs in this area. When will the conclusions of this master plan be available for presentation to Congress, and what major changes do you envision in current operational concepts and R&D and procurement programs resulting from this study?

Answer: The DOD mechanism for establishing funding priorities is the annual PPBS process, which balances warfighting requirements with available resources. The AAW Master Plan will provide a solid basis for this effort. In order to explain the AAW Master Plan, Navy is developing a series of briefings which will be provided to all appropriate committee staffs by this fall.

Question: Significant sums are embodied in the FY-89 request for current R&D and procurement programs dealing with battle group air defense capabilities. How will these programs fit into the new master plan, and why shouldn't the Congress withhold final disposition of these FY-89 requests until it sees how they fit into the master plan?

Answer: The programs identified in the FY-89 request form the departure point for the master plan, a document which will provide coherency and direction for future R&D and procurement programs to continue to pace the threat into the next century. The PPBS process accurately establishes the FY-89 and near-term goals for developing and fielding our air defense capabilities. The funds identified for this deliberate approach must be executed so our forces can continue to develop their near-term capabilities to pace the threat.

USMC Force Structure

General Gray, your statement discusses the major effort underway to evaluate possible changes to the Marine force structure, as well as changes you already want to make - such as adding personnel to Marine aviation, light armor and infantry units.

Question: When will the recommendations from this study be ready for presentation to Congress?

Answer: We anticipate being able to present you our force structure findings later this summer.

Question: Do you envision sweeping or major changes to the Marine force structure from this study?

Answer: We have completed a concept based requirements study of our force structure as part of POM 90 development and the results are being evaluated. While there will be some changes they will be more an adjustment of our internal structure to strike a balance between our real world mission requirements and the need to live in the other real world of constrained resources. We see a continuing need to be ready to instantly react to the more likely lower intensity conflicts, yet maintain the flexibility and capability to rapidly build to meet the more severe, but less likely conflicts. Consequently, armor, artillery and heavy combat service support units are being examined for movement to the Selected Marine Corps Reserve. We will seek to enhance our active infantry, assault aviation, and light armored forces, but the combination of the active and reserve forces, the total force, will not be reduced.

The force structure of the Marine Corps has remained consistent in a macro-sense throughout the last decade and will remain so in the future. Specifically, we will retain three active division-wing teams and one reserve team. The flexibility inherent in this overall organizational structure has allowed the Corps to adapt to changing situations. Our basic capability to rapidly respond with task organized, "light enough to get there and heavy enough to fight" forces will be increased. Through task organization and training orientation we will be able to perform the mission without appreciably changing the force structure.

Question: Could this study yield recommendations which have major implications for changing the direction for Marine R&D programs and the present inventory objectives for Marine weapons - whether they be rifles or mortars or aircraft and tanks?

Answer: Our intent is to minimize any increases in our inventory objectives and to work within the existing programs as far as is possible. I feel our R&D efforts continue on the right course and anticipate no major shifts in their focus. We have actually reduced our inventory objective for tanks and any increases to other weapon systems should be minimal. Based on the final study recommendations, we may request long term changes in the numbers and types of aircraft to enhance our assault aviation capability.

Question: Should we expect changes to the Fiscal 89 request in both R&D and procurement - especially regarding advance procurement for Fiscal 1990 - to result from the force structure study?

Answer: No, sir. Our FY89 budget request is consistent with what we anticipate to be the near term changes recommended by the force structure study.

NAVY REMOTE OCEAN SENSING SYSTEM (N-ROSS)

Question: Admiral Trost, your statement says we need to give increased priority to detect and attack Soviet submarines. Since better daily information of the ocean is an important part of detecting submarines, don't you agree that continuing the Navy Remote Ocean Sensing Systems would be consistent with your desire to improve anti-submarine warfare capability?

Answer: Daily information concerning the ocean and its structure is important to improve our ability to detect and attack Soviet submarines, but the costs for obtaining this information have to be weighed against other high priority requirements for these same limited funds. We will continue to seek improvements in oceanographic data, but cannot at this time afford to do this with the previously envisioned N-ROSS satellite. The Navy is investigating more cost-effective alternatives for deployment of those N-ROSS sensors which are fully developed to satisfy long term oceanographic requirements.

QUESTIONS SUBMITTED BY SENATOR BYRD

EARLY RETIREMENT OF 16 FRIGATES

QUESTION: the Navy has announced plans to retire 16 of its older frigates several years ahead of schedule -- eight in FY-88 and eight in FY-89. The Navy says this reduction will save $166 million in FY-89, or 1.35% of the $12.3 billion reduction the Navy was required to make in its FY-89 budget. Operating the 16 ships to the end of their 30 year nominal service lives (i.e., into the mid-1990's) would cost about $1.4 billion, according to the Navy. In light of the relatively minor cost savings associated with this action, some observers have suggested that the decision to retire the 16 frigates was forced on the Navy by the Office of the Secretary of Defense (OSD) less as a cost saving measure than as a symbol to those outside of the Pentagon that the Office of the Secretary of Defense has the Department of the Navy "under control". Please comment on this observation.

ANSWER: The Secretary of Defense and other DOD officials have previously stated their reasons for retiring the 16 frigates in testimony before the Congress.

It was reported that the Navy proposed putting the 16 ships into the Naval Reserve Force (NRF), where they could still count toward the attainment of the 600-ship objective, rather than decommissioning them entirely.

QUESTION: Why wasn't this alternative chosen?

ANSWER: Decommissioning the ships was determined to be the most cost-effective alternative. The Reserve alternative was neither cost-effective, nor a good alternative, because of two important reasons. First, difficulties would be encountered in getting the Selected Reservists from their in-land homes to the ships for their drill weekends. While airlift arrangements could be made, the cost would be substantial, requiring the Reservists to make many lengthy round-trip commutes each year. Second, transferring the ships to the Reserves in FY 89, only to begin decommissioning them in FY 95, would have caused a large expansion and subsequent deflation of the Reserve population. This could only be avoided by extending the ships' service lives beyond FY 95, in order to prolong their tour in the Reserves, but the required service life repairs would greatly increase the overall cost of the Reserve alternative.

QUESTION: What would be the savings in FY89, and through the end of the ships' nominal 30-year service lives, of this alternative?

ANSWER: Although a savings would be realized from reduced personnel and operating costs in the Reserves, the overall Reserve cost would be essentially the same as retention in the active force. This is because the Reserve alternative would require a substantial logistics/airlift effort to transport the Selected Reservists from their in-land homes to their coastal ship locations. There would be no savings in FY 1989, and the overall additional cost, as compared the cost of retaining them in the active force, over the ships' nominal service lives (between FY 1989 and 1997) would be $63 million.

QUESTION: The Administration says that these 16 frigates were chosen for early retirement in part because their propulsion plants are different and difficult to maintain. Several of the Navy's classes of older frigates, destroyers and cruisers are listed as having the 1,200 psi steam plant carried by the 16 frigates. What distinguishes the propulsion plants in these 16 frigates from those in the other 1,200 psi surface combatants?

ANSWER: The FF 1040 and FFG 1 classes of ships are equipped with the same type steam engineering plant. The distinguishing characteristics of these propulsion systems is the use of a "Pressure-fired Boiler" as opposed to the more common "D-type Naval Boiler". Both boiler types operate at a steam drum pressure of 1200 pounds per square inch but in most other operational characteristic differ greatly. The pressure-fired configuration is unlike any other standard naval boiler type. The pressurized furnace is a cylinder mounted vertically with the steam drum mounted horizontally above and separately from the furnace. Combustion air is supplied by an exhaust gas driven supercharger rather than by a steam driven forced-draft blower. Because these boilers operate at higher firing rates than other boiler types they are physically smaller and lighter, the original impetus for using this design for these ship types. Because these boilers have unique automatic combustion control systems, superchargers, unique fuel burner assemblies and operate over higher temperature ranges than conventional boilers, they require especially trained operating and maintenance personnel.

Question: Retiring these ships early will reduce Navy end strength requirements by 4300. How will these end strength spots be reallocated? Will the sailors be shifted to other ships, or will some spots be applied to other functional areas with a shortfall of personnel, such as Navy medical care?

Answer: In the President's FY88/89 Budget submission of January 1987 the Navy requested 9600 end strength growth for FY89 which included manning for ten new ships. The FY89 Amended Budget Submission eliminated the 9600 end strength growth and requested the same end strength level as was authorized for FY88. This reduction in planned growth was accommodated, in part, by decommissioning the 16 Frigates and reprogramming the manpower (283 officer/4093 enlisted) in a balanced manner to ensure adequate manning (92% of wartime requirements) for combat elements. End strength was retained in all 16 Frigates during FY88. The eight ships being decommissioned in FY88 will have full crews for most of the year in view of the late decommissioning decision. As these ships are decommissioned, the crewmembers will be reassigned consistent with current manning priorities while accommodating individual duty preference as closely as possible.

IMPACT ON DRUG INTERDICTION OPERATIONS OF RETIRING 16 FRIGATES

Question. The Navy has stated that several of these ships have been used recently in coastal drug-interdiction operations. Please provide information on the extent to which these ships have been used in this manner in recent years. How will U.S. drug-interdiction efforts be reduced by the retirement of these ships? Was any consideration given to the possibility of transferring these 16 ships to the Coast Guard, which is heavily engaged in drug-interdiction activities? What would be the advantages and disadvantages of this option?

Answer. A coordinated scheduling process has been established between Coast Guard Area Commanders and Navy Fleet Commanders in Chief to embark Coast Guard law enforcement teams (TACLETs) in Navy ships which operate in drug threat areas. The Navy ships serve as platforms for the Coast Guard TACLETs which are responsible for the actual boarding, search, seizure, and arrest functions. During fiscal year 1987, Navy provided 2512 ship steaming days of Coast Guard embarkation of which 1015 days, or forty percent, were from frigate class ships and 248 days were from the list of older frigates selected for retirement. Decommissioning of FFG-1 and FF-1040 class ships reduces frigate availability by nearly ten percent and impacts adversely on scheduling flexibility. Quarterly employment scheduling conferences will continue to mesh individual ship unit schedules with law enforcement operations to minimize the impact.

The unique steam plant requirements for operating these ships in concert with the disfranchisement of training courses and diminished parts support argued against offering these ships to the Coast Guard for law enforcement operations. Also pertinent was the fact that Coast Guard only operates one steam propulsion ship and personnel reductions as well as operations and maintenance funds are insufficient to operate USCG forces presently assigned.

EARLY RETIREMENT OF 16 FRIGATES

QUESTION: The Administration has stated that its plans for the final disposition of the 16 frigates are not yet firm. Options include scrapping the ships entirely, mothballing them in one form or another, or selling or transferring them to another country. According to one report, the Secretary of Defense is interested in selling or transfering some of the ships to Portugal to make up for recent reductions in security assistance to that country, thereby helping to maintain U.S. access to the important air base in the Azores. When will plans for the final disposition of the ships be firm? What options are now being considered, and toward which of these is the Administration now leaning? If the propulsion plants on the ships are too difficult for U.S. sailors to maintain, why does the Administration think that the Portuguese Navy would want or be able to maintain these ships?

ANSWER: The Navy is preparing a detailed review of the various options available for the final disposition of the ships proposed for decommissioning. This study will also address the subject of foreign military sales and the suitability of these ships for that program.

Cost of Persian Gulf Operations

QUESTION: The Navy testified earlier this month that the estimated incremental (i.e., above-normal) cost of operations in the Persian Gulf area for FY88 had dropped from the earlier figure of $15 million to $20 million a month to a new estimate of $10 million to $12 million a month. Total incremental costs for FY88, once estimated at about $240 million or more, are estimated at $130 million to $150 million. Do these estimates still hold?

ANSWER: Yes, the Navy's estimate of $130 to $150 million is still accurate.

QUESTION: The Navy testified that the reduction in the estimated incremental cost is due to a reduction in the U.S. naval presence in the Gulf area, a shift to a greater reliance on sea (as opposed to air) transport of supplies, and changes in operation methods that affected the operational tempos of ships and aircraft. Please provide additional detail on the savings made possible by each of these three changes, as well as any other factors that reduced the incremental cost.

ANSWER: The Navy was able to reduce the incremental cost of Persian Gulf and North Arabian Sea operations by the following actions:

a. The Navy reevaluted the threat in the area of operations and with the concurrence of JCS reduced the forces involved in the operations by six vessels.

b. The cost of resupply was dramatically lowered when the Navy was able to shift from air to sea. The cost of shipping supplies to the Area of Operations was reduced from $1.65 to $0.10 per pound by shifting from airlift to sealift.

c. The Navy changed its method of mine sweeping from the helicopter to ship, and rotated the helicopter mine sweeping squadron back to the United States.

d. The Navy, based on the threat, changed its policy of providing continuous airborne carrier aircraft to support the convoy operations with one of providing ready alert aircraft on the carrier during convoy operations has reduced the aircraft operating costs.

QUESTION: Congress provided $100 million to cover Persian Gulf operations in FY88. When will this $100 million be depleted? Will the Navy then have an unfunded bill of $30 million to $50 million? Will the Navy finance the unfunded portion out of its own budget, or will it seek a supplemental appropriation to cover these costs?

ANSWER: Based on current projections and assuming that the level of operations remains the same, the Navy's incremental costs for the Persian Gulf will deplete the $100 million by the end of June. The Navy plans to finance the remaining costs from within its own budget resources by reducing other programs.

QUESTION: The Navy has testified that it does not have the authority to budget for contingency operations like those now being carried out in the Persian Gulf. Funding must therefore be provided by Congress either as an unrequested Congressional add-on, or later, in supplemental appropriation. Does the Navy want the authority to budget for contingency operations such as those in the Persian Gulf? Would such authority ease Navy budget planning? Isn't there an internal contradiction between the view that naval forces are the forces of choice for the United States in responding to crises and the fact that the Navy's budget does not provide for such responses?

ANSWER: The Navy does not desire the authority to budget for contingency operations. The uncertainty of the extent and the scope of the myriad of contingency operations possible makes the problem of budgeting for such operations extremely difficult. Current options available to the Navy for covering contingencies, although not optimum, are acceptable given the degree of uncertainty involved.

14TH CARRIER AIRWING STANDING DOWN

QUESTION: As part of its FY89 budget-reduction effort, the Navy decided that "its 14th carrier airwing will stand down until the completion of the aircraft carrier Service Life Extension Program (SLEP) and the start of the delivery of our new carriers." Some plans call for the SLEPs on our older carriers to continue into the late 1990s. What is meant by "the completion" of the SLEP program? Does this refer only to the SLEPs for the Forrestal (CV-59) class carriers, or to the longer version of the plan, extending to the turn of the century, which also includes the Kitty Hawk (CV-63) and Kennedy (CV-67) classes? And does "new carriers" refer to the Abraham Lincoln (CVN-72) and George Washington (CVN-73), which will enter service in 1990 and 1992, or the two carriers funded last year (CVN-74 and CVN-75), which won't enter service until the late 1990s? In precisely what year does the Navy now plan to once again stand up the 14th airwing?

ANSWER: Completion of the Service Life Extension Program (SLEP), in this context, means completion of the last conventionally powered carrier (CV). Our plan is to SLEP all CVs, except Midway and Coral Sea. The program takes 37 months for each ship, and the last one will be completed in FY 2002. Congress approved the 15th carrier when it appropriated funds for Abraham Lincoln (CVN-72) in FY-83. George Washington (CVN-73), also appropriated in FY-83, is a replacement carrier, as are the two carriers appropriated in FY-88, CVN-74/75. In summary:

- o (CVN-72) will be our 15th deployable carrier.
- o (CVN-73) will replace USS Coral Sea (CV-43).
- o (CVN-74) will replace USS Midway (CV-41).
- o (CVN-75) will replace a Forrestal Class carrier.

Under present plans, considering current SLEP schedules, depot maintenance requirements, replacement carrier schedules, Congressional action and bugetary constraints, the 14th airwing will require standup in the FY 2000 time frame.

QUESTION: The 14th airwing was stood up last year as the crowning effort to build a naval aviation structure with 14 active and 2 reserve carrier airwings -- the numbers of airwings the Navy said were needed for its planned force of 15 deployable aircraft carriers by the turn of the decade. Can the Navy properly outfit a force of 15 deployable carriers with only 13 active and 2 reserve wings? If so, why was the 14th carrier airwing stood up in the first place?

ANSWER: DON and DOD have consistently stated a requirement for 15 CVBGs. In a 20 November 1987 letter to Senator Kennedy, SECDEF wrote: "Defense strategy, as articulated by the Unified Commanders, the Chairman of the Joint Chiefs of Staff, and supported by the President, requires 15 Carrier Battle Groups as a peacetime minimum. This is a floor, not a ceiling. This requirement is predicated on a rigorous assessment of the threat to our national security objectives. In the absence of authoritative analysis, demonstrating this assessment is no longer valid, and in the face of potential reductions in strategic weapons, I cannot support initiatives that reduce and weaken our conventional naval forces."

To support current and anticipated commitments fully requires that we keep five carriers deployed. It takes three carriers to keep one deployed; i.e., one deployed, one in post deployment maintenance and repair, and one in pre-deployment training. Since there is no evidence of a reduction in commitments, any reduction in total carriers available immediately translates to an increase in CV operational tempo. Historically, increased operational tempo has had an adverse impact on both the retention of sailors and airmen and the material condition of ships and aircraft.

The long-range plan to achieve 15 deployable CVs involves programmed new construction, service life extention/modernization measures, and orderly retirements. The disestablishment of an active airwing in FY-89 in no way implies that the 15 carrier requirement has changed. The temporary reduction in force structure, by one airwing, reflects current and projected, budgetary constraints and coincides with a period when a series of nuclear carrier refuelings, normal overhauls, and Service Life Extension Programs (SLEPs) reduce the total number of normally deployable carriers by one. Consequently, programmed deployments can be handled with one less active airwing during that period. Various management actions are being taken to meet carrier deployment requirements despite some projected aircraft shortfalls: (a) stand up of our Theodore Roosevelt airwings has been slowed to only three during the FYDP, (b) some programmed retirements will be deferred which will increase average age slightly, and (c) minor force structure modifications can be made including pipeline reductions when possible.

QUESTION: Last year, the Congressional Budget Office issued the latest in its series of studies on the naval aviation requirements. The report implied in its options section that even if the Navy's current procurement plans are fully funded, the Navy in the 1990s will have only enough aircraft to equip about 13 of its carriers. Does the Navy agree with the conclusions of the CBO study? If not, why not? Will the standing down of the 14th carrier airwing reduce aircraft shortfalls in the other airwings? If those shortfalls existed, why was the 14th airwing stood up last year?

ANSWER: The Congressional Budget Office recently estimated an FY 1994 shortfall of 176 aircraft overall, which included 119 carrier based aircraft. These projections were based on the FY-88/89 APN budget submission and associated force structure which included 14 active airwings. By reducing the number of active airwings to 13, the carrier based aircraft requirements is reduced by 123 aircraft. Actual outyear shortfalls will be dependent on procurement strategy, end strength, and force structure which is being formulated in our on-going budget process. Projected shortfalls will continue to be managed by proven initiatives of minor force adjustments, selective utilization of USMC squadrons, and pipeline reductions when possible.

It should be noted that an overall shortfall of 78 aircraft is approximately 1.5% of the projected active inventory and that a 21 carrier aircraft shortfall represents the smallest CV aircraft shortfall in many years. Additionally, even with constrained budgetary forecasts, average combat aircraft age only rises one year between FY-89 and FY-94. Although not desireable, minor force aging, accompanied by technological improvements, is considered a prudent risk in this environment.

QUESTION: It has been reported that one option now being considered for responding to continued reductions in the Navy's budget in future years will be to stand down the 13th active carrier airwing. Please comment on this report. And if this airwing is stood down, would the Navy then be forced to reduce its objective for deployable carriers to something less than 15?

ANSWER: The Navy carrier requirement is established by wartime and peacetime commitments as determined by the Joint Chiefs' worldwide threat assessment and national security objectives. There are no plans currently to stand down an additional carrier airwing. If we were forced to reduce our active airwings to 12, the result would be an inability to simultaneously deploy 15 CV battle groups in time of national emergency. This mismatch of airwings to CVBG's would stretch our ability to cover known commitments resulting in an undesirable toll on our people and equipment. We do not desire to return to the low material readiness rate and poor retention experienced in the 1970's as a result of overextending our carrier deployments.

According to Secretary Carlucci, "a 15 deployable carrier battle group Navy is the floor, not a ceiling, for required force level. I have supported this requirement in the past, do so today, and (as long as the threat and commitments are not reduced) will do so in the future. It is my belief that the requirement to achieve a 15 deployable carrier battle group Navy at the earliest opportunity remains valid and we should continue to pursue it aggressively."

NAVAL MEDICAL CARE

Question. The Navy's leadership is to be applauded for recognizing the need to improve its medical care situation, and for protecting the Navy's medical care improvement effort as a high Navy priority in the face of stringent budget and endstrength limitations. But how, in the previous years of budgetary plenty, did the Navy's medical care establishment fall into its current lamentable condition? Why was it allowed to decay during the period when the Navy's budget was going up? In a time when other parts of the Navy were benefiting from ample funding, was the medical care establishment the victim of a hidden "decade of neglect"? How long will it take to bring the Navy's medical care establishment into a fully acceptable condition? How much added money will this effort require?

Answer. Many factors converged over the past six years to put naval medicine in the position it is today. Expansion of the active duty force associated with ships and airplanes; the corresponding increase in the number of dependents associated with this all-volunteer force; a retiree population that doubled in size between 1966 and 1981 and continues to grow; CHAMPUS cost-containment efforts that returned workload to MTFs at the expense of physicians and quality care; development and implementation of quality assurance initiatives; expanded emphasis on wartime readiness that took healthcare providers out of the MTF, put them on aircraft carriers and other ships and required the expense of numerous man-hours of training; and increased temporary duty assignments to support fleet operations and the Fleet Marine Force have had a major effect on naval medicine's ability to deliver healthcare.

A plan existed in the early 1980's to markedly increase the number of personnel on active duty in our healthcare fields. That plan fell by the wayside when we were denied the increased end-strength that was not directly associated with ships and aircraft being brought into the inventory. We lost that portion of our endstrength request every year until fiscal year 1988, which has made it difficult to resolve the problem.

The Navy's FY-88/89 medical plan provided last summer to Senator Glenn and Congresswoman Byron outlined our immediate manpower goals to "get well" by FY-92. A long-range Naval Medical Strategy is being considered by the Navy. Additional costs for FY-90/97 to achieve and sustain the improvements could total $2.7 billion over the February 1987 five-year defense plan (FYDP). These funds are in lieu of increased CHAMPUS dollars and will eliminate the projected CHAMPUS shortfall.

AEGIS SALE TO JAPAN

The Administration is proposing the sale of the Navy's Aegis surface-ship combat system to Japan for installation aboard a new class of Japanese destroyers. The Japanese would buy each Aegis system at a cost of about $525 million for installation on hulls built in Japanese shipyard. But the Seapower subcommittee of the House Armed Services Committee voted earlier this month in favor of H.R. 3724, which would effectively prohibit the sale of the Aegis system to Japan, on the grounds that this technology is too valuable to share even with Japan.

QUESTION: What is the record of the Japanese government (as opposed to Japanese firms or individuals) with respect to the protection of sensitive technology?

ANSWER: The Japanese Government record is impeccable. We have no evidence that any sensitive technology has been improperly protected. Their security procedures are exemplary and are as tight as those imposed by the U.S. military.

QUESTION: What steps are being taken to insure that here will be no unwanted transfer of AEGIS technology?

ANSWER: In addition to the standard security requirements which are imposed in the Letter of Offer and Acceptance, special security requirements for AEGIS will be imposed on the Japanese Government by a Special Security Memorandum of Understanding.

QUESTION: What is being done to prevent the Japanese from reverse-engineering the system? Please provide a detailed unclassified explanation of the steps being taken to protect the systems many components from theft and reverse engineering.

ANSWER: Any system can be reverse engineered. In this case by withholding sensitive software source codes and not provided any of the production drawings and schematics, reverse engineering would be extremely difficult. It is estimated that it would take the Japanese from 10-13 years with a national commitment to the project in order to reverse engineer the AEGIS weapon system.

QUESTION: Why can't Japan's AEGIS-equipped destroyers be built in the United States, where there are shipyards experienced with the construction of such ships and other yards that recently bid unsuccessfully for the construction of the U. S. Navy's own new class of AEGIS-equipped destroyers?

ANSWER: The Japanese informally examined the possibility of procuring the Burke Class DDG, but it presented significant logistic and design complications. Had the Japanese elected to purchase a Burke Class DDG it would have involved major redesign and modifications in order to fulfill the DDGX staff/command and control requirements, remove U. S. Navy unique equipment, and integrate their domestically designed and built system. Additionally, Japan cannot export defense equipment so installation of all domestically produced equipment after delivery to Japan would have lengthened the final delivery schedule to the Japanese fleet and most likely resulted in exceeding the five year limitation from funding to commissioning imposed by the Japanese Diet.

QUESTION: With our experience in the combat system's integration of complex surface combatants, isn't this a clear case of where the United States can build something and sell it to Japan?

ANSWER: Yes, but not within the five years that the Japanese procurement system allows for the ships commissioning date. Additionally, the Japanese shipyards are fully capable of constructing the hulls and this was a key selling point to the Japanese Diet who approved funding for this program.

QUESTION: Couldn't the Japanese shipyards slated to build the AEGIS equipped destroyers instead build different kinds of ships for the Japanese Maritime Self Defense Force (JMSDF)?

ANSWER: Past performance would seem to indicate that the Japanese would either construct more less capable ships or buy the AEGIS system from the U.S., but not both. If Japan chooses the less capable ships we would not have 1.5 billion dollars in projected U.S. exports, nor would a strategically positioned ally have an outstanding, fully capable interoperable asset where it could best benefit the U. S..

QUESTION: Wouldn't this accelerated the modernization of the JMSDF, thus enabling Japan to protect its sea lanes out to a distance of 1,000 miles?

ANSWER: Yes this would accelerate the modernization of the JMSDF if the Japanese were to budget such a plan.

LOS ANGELES (SSN-688) CLASS ATTACK SUBMARINE

QUESTION: The shipbuilding plan calls for the procurement of only two Los Angeles (SSN-688) class submarines per year in FY89, FY90, and FY91. In recent years, the procurement rate has been three or four per year. Contracts for the submarines are competed between two shipyards — General Dynamics' Electric Boat Division, and Newport News Shipbuilding and Dry dock Company. A minimum of three ships per year is believed by many to be the minimum required to maintain a healthy competition between two shipyards in a major shipbuilding program. How will the Navy be able to sustain a healthy two-yard competition in this program with a procurement rate of two ships per year?

ANSWER: The procurement of SSN-688s should not be considered independent of other related shipbuilding programs. The entire workload of the contractors should be considered, not just the number of SSN-688s to be constructed each year. When considered with the workload required for the construction of the SSN-21 class, the TRIDENT program at Electric Boat Division and nuclear carriers at Newport News Shipbuilding, the Navy concludes that both shipyards will stay competitive for the remaining SSN-688s in the program.

QUESTION: The Navy testified earlier this month that "The (SSN-688) class) ships being constructed at Newport News are from one month ahead of schedule to fourteen months behind schedule. At Electric Boat, one is one month behind schedule and the remaining seven are from seven to nine months behind schedule. All SSN-688 contracts (FY80 to FY87) are projected to exceed target costs." What caused these schedule slippages and target-cost overruns? How much of the blame for this situation rests with the Navy, and how much with the two shipyards? Why have these program slippages and target-cost overruns come to light in this magnitude only in this year? If these slippages and overruns began to develop in FY80, why wasn't the Navy able to redress the situation by FY87? What is the potential cost to the government of the target-cost overruns?

ANSWER: 23 ships are currently under contract to the two submarine shipbuilders (Electric Boat Company and Newport News Shipbuilding and Drydock Company) for awards in FY80-FY87. A major provision of these contracts involves "target cost" and "ceiling cost." Above "target cost" the Navy and the shipbuilding evenly share all costs, up to ceiling. Above "ceiling cost," all costs are absorbed by the shipbuilder.

The Navy's business strategy in the last six years has stressed the aggressive use of competition between shipbuilders. Through this competition the target costs of shipbuilding contracts have declined while the risk of exceeding the target costs have increased. The Navy and the two shipbuilders are now projecting cost growth above contract target cost. The contractors' estimated cost growth above target is about $770M, while the Navy's more conservative estimates indicate that the cost growth could be about $1.2B above contract, with the government's share about $600M. The Assistant Secretary of the Navy (Shipbuilding and Logistics) has stated that the Navy currently has the funding to cover these costs.

The cost growths above target cost for the 688 program are the result of aggressively bid target costs, unrealized productivity improvements and changes associated with added capabilities. In spite of cost sharing above target costs the Navy is still obtaining these ships at lower costs than if competition did not exist. To place this lost growth in perspective, these additional costs represent only about 4% of the original cost estimates for the ships.

In ship construction a shipbuilder must consider quality, cost and schedule. Obviously, quality must be maintained, particularly in submarine construction, and the shipbuilder must control costs. These considerations tend to drive the schedule. It is normally to the shipbuilder's advantage to deliver the ships as quickly as possible; however, no direct penalty is imposed on a shipbuilder for extending the construction period. The delivery slippages were caused by changes to government-provided information associated with the addition of SSN-688 capabilities, new facility learning, skilled manpower shortages and less-than-anticipated productivity. The situation is currently being addressed with both shipbuilders.

Ship delays and cost growth projection did not occur in FY80. These problems began to appear in FY84 on the ships awarded in FY80. The Navy continually assesses schedule and cost performance, as do our contractors.

Last year at this time the Navy was projecting schedule slippage of up to seven months. Cost growth was reported in the 31 December 1986 Selected Acquisition Report at $.6 billion with an additional $.2billion estimated at the time of the FY87 (February 87) contract award.

As a point of reference, these modest losts on submarines pale in comparison to cost savings overallin Navy shipbuilding. For Navy shipbuilding programs in the private sector since FY 1983, savings are better than $7 billion below the President's original budget requests for these programs.

QUESTION: The Navy also testified earlier this month that the "Addition of (an) under-ice capability and the BSY-1 (submarine combat system) caused redesign and production process changes impacting 80% of the (SSN-688 class's) nonpropulsion drawings. We fully expected to pay for these changes, which nave undergone revision as technical issues arose, but they are more extensive than originally planned. A reprogramming may be required." Are we heading for a replay of the SSN-688 program management disaster and government bailout of the mid-to-late 1970? If not, why not? How much money may have to be reprogrammed to cover the potential government liability? In light of these events, why should Congress have any confidence in the Navy's ability to construct the new SEAWOLF (SSN-21) class attack submarine on schedule and within stated cost ceilings?

ANSWER: We are not heading for a replay of the past. In the late 1970s the government used the provisions of Public Law 85-804 to grant extra contractual relief above the amount the government determined the contractors were entitled to receive as a result of the claims. The Navy expects to settle existing problems concerning changes to government-provided information associated with added SSN-688 capabilities within the confines of existing contracts. The Navy and the contractors are actively pursuing resolution of issues concerning government liability under existing contracts.

The Navy is currently conducting the annual Ship Cost Adjustment review which, when completed, will address funds available within the SSN-688 program. If funds are determined to be required and assets are identified in this process from other programs, a reprogramming action will be forwarded for your approval.

Congress should be confident that the SEAWOLF will be constructed on schedule and within cost ceilings for the following reasons:

° To reduce shipbuilder cost and improve schedule performance, SEAWOLF is being designed for producibility employing modular construction concepts consistent with the lessons from the highly successful TRIDENT modular construction program.

° Both Electric Boat and Newport News are participants in the SEAWOLF detail design. Each is reviewing the other's design work and full-scale mockup, providing open and free exchange of experience and information and thus increased producibility/productivity.

° A gap-year interval is planned between construction authorization of the lead and first follow ships, allowing for incorporating lead-ship construction lessons into follow ships.

° The cost growths stated for SSN-688 class acquisition are amounts by which the estimated cost will exceed the target cost in the contract. For recent contracts, the contract target cost (the bid) has been below the Navy's cost estimate and the fact that the actual costs are above target cost on the SSN-688 program does not invalidate the cost estimating for SEAWOLF. The cost estimates for SEAWOLF are based upon multiple independent cost estimates.

NAVAL AVIATION

QUESTION: During the past five years (FY84-FY88), annual procurements of Navy/Marine Corps combat aircraft have averaged 224, with annual buys of fighter/attack planes averaging 146 in these years. The Administration's FY 1989 budget would procure 161 combat aircraft for the Navy Department, including 108 fighter/attack planes (72 F/A-18s, 24 AV-8Bs, and 12 F-14s). Many defense analysts have concluded that the Navy Department is not buying enough aircraft to meet the Department's stated requirements for Navy/Marine Corps aviation. Please comment on the Navy's current plans and projections for meeting inventory requirements, noting implication for Navy and Marine Corps force structure and the average age of combat aircraft and fighter/attack planes through the 1990s. If the Navy's oldest aircraft carriers (Midway and Coral Sea) were decommissioned, how would this affect inventory requirements for carrier aircraft? How would this affect the force mix of our carrier air wings? What would be the budgetary effect of operating and maintenance costs if these two carriers were not in active service?

ANSWER: The Congressional Budget Office recently estimated an FY 1994 shortfall of 176 aircraft overall, which included 119 carrier based aircraft. These projections were based on the FY-88/89 APN budget submission and associated force structure which included 14 active airwings. By reducing the number of active airwings to 13, the carrier based aircraft requirement is reduced by 123 aircraft. Actual outyear shortfalls will be dependent on procurement strategy, end strength, and force structure which is being formulated in our on-going budget process. Projected shortfalls will continue to be managed by proven initiatives of minor force adjustments, selective utilization of USMC squadrons, and pipeline reductions when possible. The minor aging of the aircraft inventory (one year), although not desirable, is considered a prudent risk in a fiscally constrained environment. It should be noted that the projected active inventory shortfall is approximately 1.5% and is comparable to historic levels which have been successfully managed for many years. When CORAL SEA and MIDWAY are replaced by CVN-73 and CVN-74, aircraft requirements will increase by 29 aircraft per airwing. This includes training and pipeline aircraft. The force mix for these airwings will be changed with the addition of two F-14 squadrons and one S-3A squadron, and reduction of one F/A-18 squadron. The problem however, is not totally aircraft numbers but the right mix of aircraft to ensure a modernized force to meet the threat. The Navy will continue to modernize the airwings, ensuring a stable plan in order to expand the force in the late 1990's.

Our analysis indicates that early retirement of MIDWAY and Coral Sea will not appreciably reduce direct operations and maintenance cost of global carrier battle group operations since the fuel and spare parts consumption of the remaining carriers will be increased. The relatively small real savings realized would not offset the adverse impact on readiness.

ATA/ATF PLANS

QUESTION: The FY 1989 budget requested a classified amount to continue development of the Navy's Advanced Tactical Aircraft (ATA), now designated as the A-12, which is intended to replace the Navy's all-weather A-6 attack plane in the late 1990s. The A-12 could also serve as the Air Force F-111's successor. Similarly, a version of the Air Force's Advanced Tactical Fighter (ATF) modified to operate aboard aircraft carriers could become the Navy F-14's successor. Congress has authorized funds for the ATF and and ATA programs on condition that these aircraft be designed for dual-service use.

What are the current plans and prospects for Air Force use of the A-12 Advanced Tactical Aircraft to replace the F-111? What are the Navy's plans for replacing the F-14 with a carrier-capable version of the Air Force ATF? In view of our current budgetary problems, would it not be better to upgrade existing aircraft such as the A-6 and the F/A-18 instead of developing and and producing and entirely new attack aircraft such as the A-12?

ANSWER: Air Force is working very closely with Navy on the A-12 program. An Air Force flag officer was a voting member on Navy's Source Selection Committee; an Air Force staff officer is assigned full time to the Navy's program office; an Air Force A-12 program office has been established at Wright-Patterson AFB; and Air Force has requested FY-89 funds for an A-12 program. Air Force has testified and SECDEF has certified that an Air Force variant of the Navy A-12 meets all the requirements for an F-111 replacement. Air Force is currently discussing A-12 procurement profiles as part of their FY-90 budget process.

Navy has testified and SECDEF has certified that a carrier capable variant of the ATF could probably meet the requirements for an F-14 follow-on. Air Force is the lead service on ATF and is currently in Demonstration/Validation (DEM/VAL) phase with two competing designs. Full Scale Engineering Development (FSED) with the winning design is scheduled to begin in 1991. A Navy variant of the ATF (NATF) would not enter Navy inventory before the late 90's. Navy has established an NATF office in Navy Air Systems Command, has a Navy staff officer assigned full time to the Air Force ATF program office at Wright-Patterson AFB, and has completed a review of both competing designs in term of modifications necessary for carrier operations. Navy has testified that there are no "showstoppers" in either design; both are capable of being modified. The ATF designs are now maturing under Air Force leadership. Navy will maintain its close relationship with the Air Force and the competing contractor teams. When the Air Force and Navy jointly make a source selection decision, Navy will be able to make a definitive statement on the costs of modification for an NATF. Navy has testified that a carrier-capable version of the Air Force ATF is feasible and would be a possible replacement for the F-14.

Although we do face budgetary constraints, the A-12 program must stay on track - it is the program for maintaining a U.S. advantage in conventional forces during the next decade. The A-12 replaces the A-6 for the Navy and replaces the F-111 for the Air Force. (F/A-18 is a strikefighter which is different aircraft with a different mission.) The Navy A-6 and Air Force F-111 aircraft could singly attack targets in North Vietnam in 1972 and survive. (Deleted) Navy looked at upgrading an A-6 aircraft (deleted) and developing a new design. All of our analysis shows that a quantum leap in combat effectiveness is not only possible but very cost effective with a new design, (deleted). Upgrades that can be accomodated will help through the early 1990's, (deleted) now to maintain U.S. advantage in conventional forces capability in the late 1990s and into the next century.

NAVAL AVIATION

QUESTION: In regard to the AV-8B Harrier II aircraft, the Defense Department has proposed a multi year procurement plan whereby 24 aircraft would be procured annually in the FY 1989-1991 period. The proposed plan would reduce procurement of this vertical/short take-off and landing (v/STOL) aircraft from the 328 production aircraft originally projected to 276 AV-8B's. Because of its flexible basing and rapid response capabilities, the AV-8B has been the Marine Corps' highest priority for close air support of ground troops. Please explain how the proposed reduction to a 276-plane program will affect Marine Corps force structure.

ANSWER: The AV-8B remains the Marine Corps' highest priority for close air support. The reduction to a 276-plane program will not immediately impact on the Marine Corps' current AV-8B transition plan to standup eight AV-8B light attack squadrons by 1991. Because the aircraft is expected to achieve a significantly reduced attrition rate as compared to its predecessor, the Department of the Navy expects to be able to sustain the force structure into the mid-1990's. Beyond that time, and depending on the actual attrition rate, selective management actions involving the pipeline and training aircraft will be utilized to support the force structure until a decision regarding a follow-on aircraft and requirement is made.

Senator Byrd: How will the force structure be affected if the 24 AV-8B's requested in the FY-89 budget are not funded?
Answer: There are several major impacts on Marine Corps CAS force structure and capability if the 24 aircraft requested in FY-89 are not funded. Chart **(1) depicts the resultant force structure degradation over the life of the AV-8B program.**

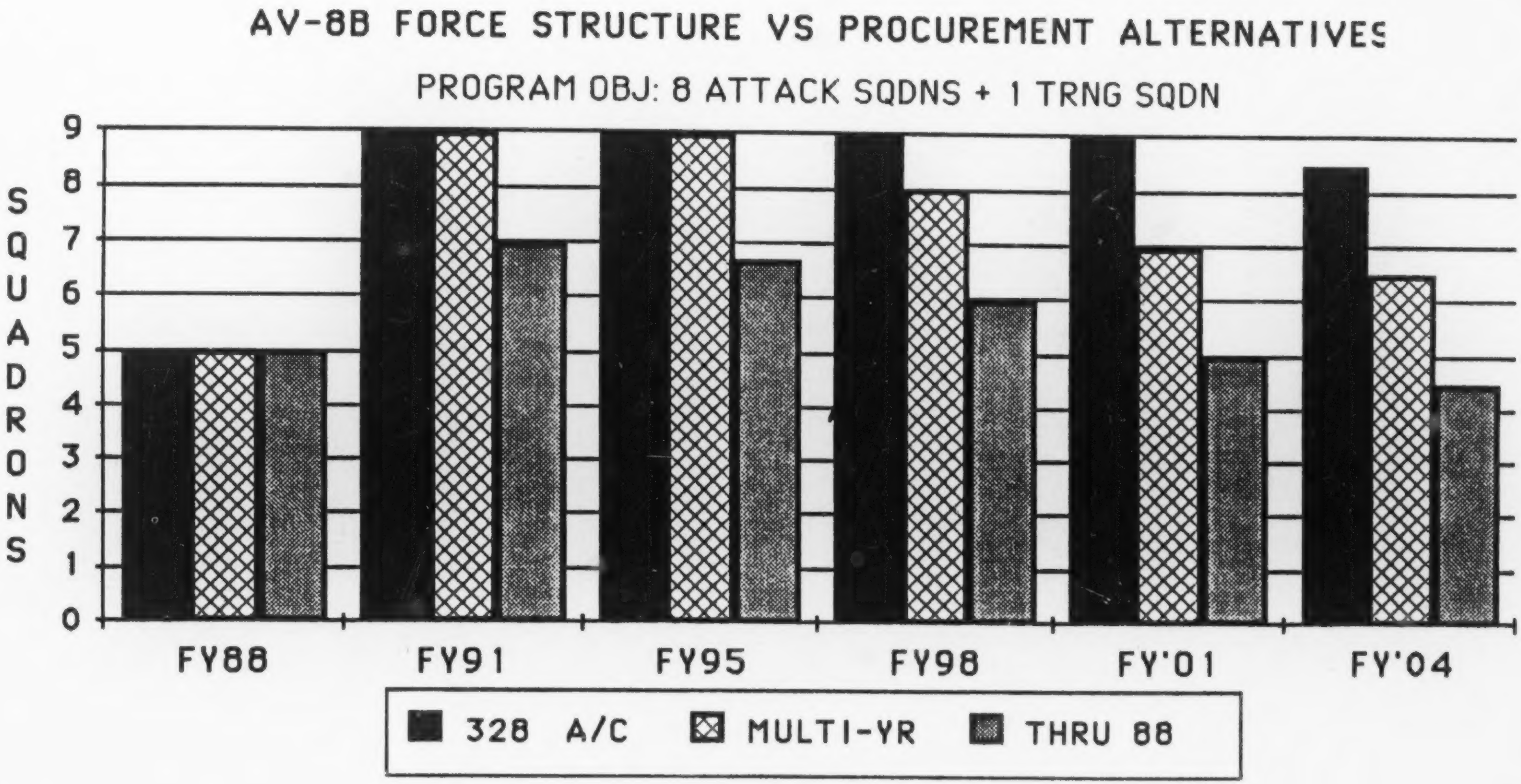

AV-8B FORCE STRUCTURE VS PROCUREMENT ALTERNATIVES
PROGRAM OBJ: 8 ATTACK SQDNS + 1 TRNG SQDN
SQUADRONS
0
1
2
3
4
5
6
7
8
9
FY88
FY91
FY95
FY98
FY'01
FY'04
■ 328 A/C
⊠ MULTI-YR
▨ THRU 88

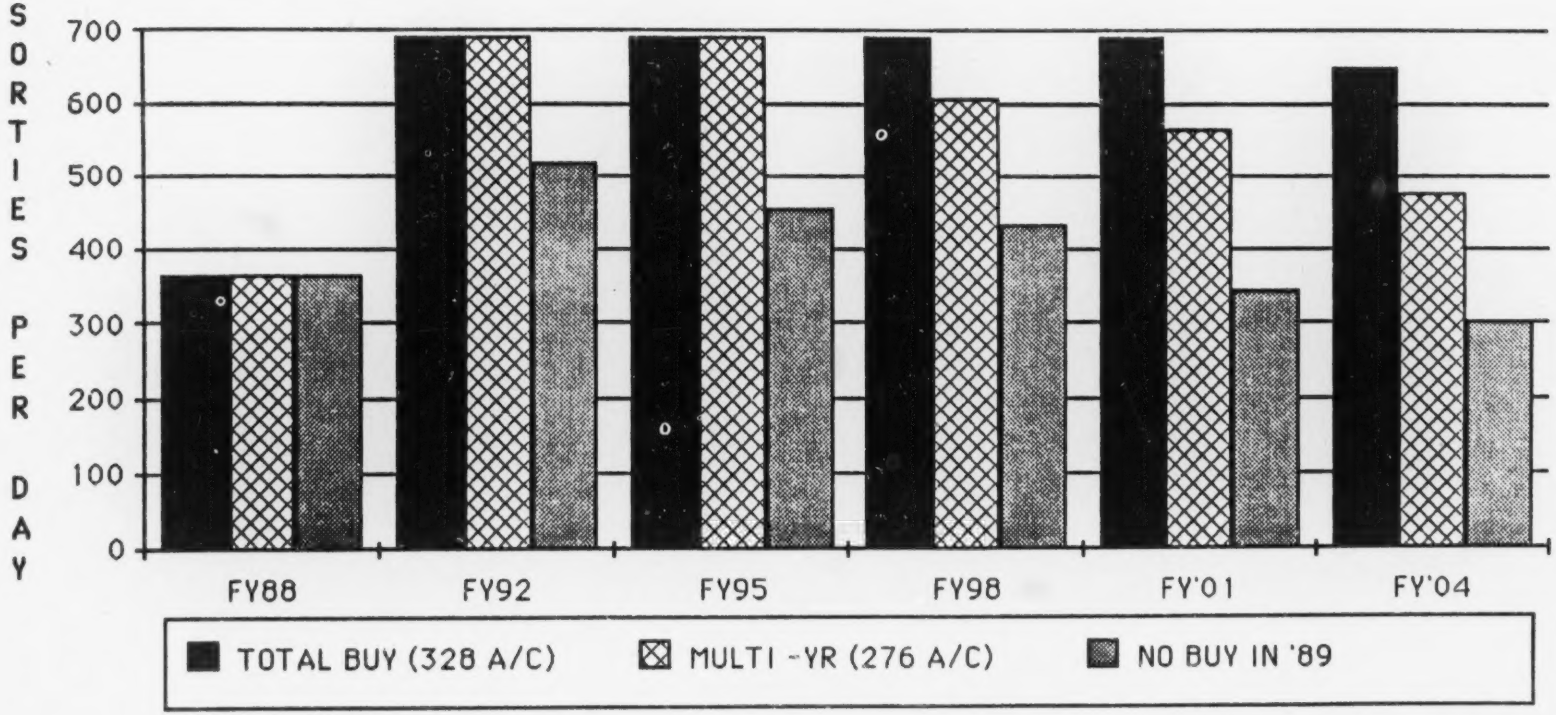
CHART 1

First, AV-8B procurement through FY-88 is only sufficient to stand up six of eight planned AV-8B attack squadrons and would leave the Marine Corps with no funded alternative to replace its remaining two A-4M squadrons. Further, given historic AV-8B attrition to date, procurement through FY-88 would only be sufficient to sustain this reduced force level through 1995. AV-8B force structure would continue to erode through the 1990's to 5 attack squadrons by 1998 and less than 4 squadrons by 2004; the soonest that a suitable replacement is forecast to be available.

Second, termination of AV-8B procurement after FY-88 will, in all likelihood, neccessiate the cancellation of the AV-8B night attack program. Production of the AV-8B night attack variant commenced with FY-88 procurement. While a 24 hours CAS capability is essential, FY-88 AV-8B night attack procurement is only sufficient to standup one night attack squadron. Logistically it would be neither cost effective nor operationally practical to support a single night attack squadron.

Third, arresting AV-8B procurement after FY-88 will significantly degrade the number of daily CAS sorties available to the ground combat element over the 1990's. When operating from conventional airfields the AV-8B can sustain a 1.25:1 sortie rate advantage over conventional aircraft such as the F/A-18. When forward based from a VSTOL facility or austere site located 75 NM or less from the front lines, this sortie rate advantage increases to 2:1 over conventional aircraft due to shorter mission flight times and rapid turnaround capability. Therein lies the real combat advantage of the AV-8B. Chart (2) depicts the erosion in daily CAS sortie capability should the 24 aircraft requested in FY-89 not be funded. As shown, by the year 2001, the residual AV-8B force would only be capable of generating approximately 50% of daily CAS sorties of our currently planned AV-8B force.

AV-8B FORCE CAS SORTIES PER DAY*



*SORTIES/DAY WITH 2/3 OF FORCE BASED WITHIN 75 NM OF FRONT LINES

CHART 2

Senator Byrd: Will a 276-plane program provide enough attrition assets to maintain the Marines' VSTOL capability through the 1990's?
Answer: The answer to this question must be predicated upon fleet AV-8B attrition experience to date. Based on a limited sample of four operational squadrons and one training squadron, actual attrition to date has been equal to or slightly greater than predicted. Should we continue to realize the predicted AV-8B attrition rate, the 328 aircraft program requirement is valid and a 276-plane force will only be sufficient to standup and sustain our planned force structure through approximately 1996-1997. After 1997, this force would continue to erode through normal attrition to less than six attack squadrons by 2004 as shown in Chart (1). Concurrently, as shown in Chart (2), the AV-8B daily CAS sortie capability would be reduced by 30% over this period.

However, experience in other programs has shown that attrition rates may decrease as operational experience is gained in an aircraft and as sources of material related accidents are eliminated through equipment corrections and upgrades. The Marine Corps expects that programs such as the AV-8B engine upgrade program will have a positive effect on AV-8B attrition. The AV-8B multi-year proposal in front of the Congress will give us adequate time to continue our assessment of total attrition requirements.

Senator Byrd: What would be the budgetary effect in both acquisition costs and operating costs of using F/A-18s instead of AV-8Bs for close air support missions?
Answer: The F/A-18 would be a far more costly alternative to meet the Marine Corps' CAS requirements. Any cost comparison must be viewed from two perspectives. First, as a simple one-for-one-replacement and second, replacement with equivalent capability.

a. The average multi-year unit procurement cost of an AV-8B is $21.2M compared with $31.8M for the F/A-18 over the same period. The additional cost of simply maintaining the Marine Corps' light attack structure at eight squadrons of 20 aircraft using the F/A-18 as an alternative is, at minimum, $1,405M in FY-90 dollars. This breaks down to additional $1,005M in acquisition costs, $300M in MILCON costs and approximately $200M in operating costs. Additionally, this alternative could not be accommodated within our current manpower structure without a commensurate reduction in another warfighting area.

b. The dollars cost of providing equivalent capability is far greater. Since the AV-8B has a CAS sortie generation rate advantage over the F/A-18 of 1.25:1 from conventional airfields and 2:1 when operating from a VSTOL facility within 75NM of the front lines, a true replacement must be capable of generating an equal number of daily CAS sorties. Using an average 1.7:1 AV-8B CAS sortie generation advantage over the F/A-18, the additional acquisition cost of the F/A-18 would be over $2.2B for an equivalent capability.

The above cost comparisons do not include the inherent advantages of a VSTOL aircraft such as response time and basing flexibility. The AV-8B meets the Marine Corps CAS requirements better than any aircraft in the world today. No other aircraft can sustain such a high CAS sortie rate day after day. By any measure it is truly the lowest cost alternative, in both dollars and manpower, to meet the Marine Corps' CAS requirement.

V-22 OSPREY ISSUES

QUESTION: The Administration's proposed FY89 budget includes $642 million to begin production of the V-22 tilt-rotor, a new type of aircraft being developed by the Navy Department to replace the CH-46 helicopters now used by the Marine Corps to transport troops and equipment. Initiated by the Army in 1981 as the JVX, a joint-service program involving the Army, Air Force, Navy and Marine Corps, the V-22 tilt-rotor could replace aging helicopters of all four services. Last year the V-22 program was estimated to cost almost $30 billion for 919 aircraft ($32.3 million per unit), including some 230 aircraft that the Army reportedly no longer intends to buy. Although the V-22 offers new technology that appears to have useful applications for civil aviation, critics question its affordability and multi-service use. Please comment on the affordability of the V-22 in light of current constraints on the Navy budget. What is the current projection of the program cost, procurement quantity, and service use of the V-22 aircraft? If the Army does not buy the V-22, how will that affect the unit cost of the aircraft? Would it not be possible to use modernized CH-46s or other helicopter types for the transport missions to be performed by the V-22?

ANSWER: Studies completed support the fact that this aircraft will possess the capability and present the affordability required for joint service use. The V-22 program is designed to provide an aircraft to meet the amphibious/vertical assault needs of the Marine Corps, the Combat Search and Rescue needs of the Navy, and the Special Operations needs of the Air Force. The V-22 will replace the CH-46 in the Marine Corps, the HH-3A in the Navy, and supplement the H-53, H-60, and C-130 aircraft in the Air Force.

The current projection of the program cost is $23.0 billion, including a procurement quantity of 657 aircraft. Total procurement quantities have decreased by 256 aircraft (Army withdrawal and Air Force reduction from 80 to 55 aircraft). The airframe estimates included in the FY 1988/FY 1989 amended budget submission are based on the original planned buy of 913 aircraft. However, preliminary analysis indicates an increase in unit fly-away cost of approximately $1 million dollars would be attributed to the impact of quantity reductions.

It would not be practical to use modernized CH-46's or other present day helicopter types for transport missions to be performed by the V-22. No present day or planned helicopter can perform that mission in an affordable manner especially considering the flexibility, survivability, and reliability afforded by the V-22 aircraft.

TRIDENT FORCE LEVEL UNDER START

Question: Current Navy planning envisions a fleet of at least 20 TRIDENT submarines to replace the aging POSEIDON submarines. START limits of 6,000 total warheads and 4,900 ballistic missile warheads, however, would seem to preclude a 20-TRIDENT fleet, as a fleet that large would permit just over 1,000 ICBM warheads and would cut sharply into the bomber force as well. While a final decision on numbers of TRIDENTs deployed under START must await completion of such an agreement, what is the most likely number of TRIDENTs that would be deployed under START according to current thinking?

Answer: Our Strategic Triad is a complex structure. The number of TRIDENT submarines we ultimately build will be influenced by the sizing of the other legs of the Triad with respect to Strategic Arms Reduction Talks (START). TRIDENT submarine force level requirements must be based on National Guidance and JCS goals. SSBNs must provide the cornerstone of our future national deterrence with its dominant capabilities and coverage of the full target spectrum. A minimum force level of 23 TRIDENT submarines would be required to cover the projected targeting requirements and meet any potential port egress threat in a constrained START environment. The TRIDENT SSBN in the FY-89 budget (the sixteenth TRIDENT submarine) will not loadout missiles until 1995. This would result in a total of only 3072 warheads on TRIDENT submarines. At a building rate of one per year the twentieth TRIDENT submarine would be authorized in FY-93, would loadout in 1999 and would result in only 3840 warheads on TRIDENT submarines. Therefore, it is not necessary nor desirable to establish an ultimate force level objective for TRIDENT submarines at this time.

TRIDENT CONTRACT TERMINATION IN EVENT OF START

QUESTION: The FY-89 budget requests procurement funds for the sixteenth Trident and advance procurement funds for the eighteenth. Advance procurement funds for the seventeenth Trident were provided for FY-88. Yet it is possible that the United States would decide to deploy only 15 or 16 Tridents under START. Have any contingency plans or contract provisions been made for terminating work on any Tridents beyond the number to be deployed, in the event that a START accord is reached?

ANSWER: Setting a TRIDENT force level is neither necessary nor desirable. The TRIDENT building rate is only one per year. At that rate advance funding for the 21st TRIDENT would not be requested until fiscal year 1992. Between now and then, several factors--further arms control agreements, the composition of other legs of our strategic Triad, and changes in the Soviet target base--will influence force size decisions. TRIDENT submarine force level requirements must be based on National requirements. SSBNs will be the backbone of our future national deterrence with its superior capabilities and full target spectrum coverage. A minimum force level of 23 TRIDENT submarines would be required to cover currently projected targeting requirements and meet any potential port egress threat in a constrained START environment. All government contracts include standard work termination provisions.

TRIDENT VULNERABILITY

Question: The fewer TRIDENTs that are deployed, the more vulnerable the TRIDENT fleet would seem to become, as it would be easier for Soviet attack submarines to trail fewer TRIDENTs as they leave port. Is this a concern under

START? Is there some TRIDENT force size below which this becomes a serious problem?

Answer: We believe SSBNs are invulnerable while at sea and will remain so in the forseeable future, but we recognize that inport SSBNs could be attacked as could any land based deterrent force. With a smaller force size any single SSBN becomes more valuable as a percentage of the force. If the number of SSBNs were reduced, the number of SSBNs inport and leaving port could provide more inviting targets. This could result in decreasing the survivability of the SSBNs since an adversary's perception of risk versus gain from threatening such an attack could result in their seeing the same risk but a higher gain.

TRIDENT IMPROVED SURVIVABILITY

Question: Several recent articles allege that the Navy is upgrading the TRIDENT submarine's combat systems to be the same as those used on attack submarines because of improvements over the last few years in Soviet submarine quietness. Did Soviet advances lead to this upgrade? If not, what did? Has the threat to TRIDENTs posed by Soviet attack submarines increased substantially over the last few years, or have U.S. advances kept pace with the threat?

Answer: The precautions and procedures currently in use to ensure TRIDENT port egress and patrol security will remain effective against current and future Soviet attack submarine threats. There is no realistic possibility that the Soviets will be able to deploy a submarine or submarine detection system in the 1990's that could pose any significant threat to our SSBNs during port egress or patrol. U.S. intelligence estimates agree with this assessment. These estimates reflect that the Navy has always provided our strategic submarines with the best possible defense systems, and will continue to do so. Therefore, the Navy intends to install functionally equivalent combat systems on TRIDENTs and 688 class attack submarines. By doing this we will provide capability upgrades that were already being planned for the TRIDENT combat system, while reducing life cycle costs. Installation of this system will also optimize logistic support, increase manning and training efficiency, and provide a modular advanced combat system capable of rapid software updates.

QUESTIONS SUBMITTED BY SENATOR DECONCINI

ARMS CONTROL IMPACTS ON SLCM

Question: Yesterday in the Washington Post, a proposal was reported as being discussed by Secretary Shultz and Soviet Foreign Minister Shevardnadze to form teams of inspectors from each country to periodically "inspect nose cones of ballistic missiles, scrutinize weapons carried by individual bombers, and visit naval ports" for a strategic treaty. These measures far exceed the intrusiveness of those established in the INF Treaty.

I have a number of concerns regarding mutual verification and monitoring, but not at the expense of unfair or misguided intrusiveness. Should the START negotiations involve sea-launched cruise missiles, can or should the U.S. restrict these highly accurate missiles? How can we verify this? Can you take me through a hypothetical scenario or a verification scheme as to how inspection teams would handle this issue, especially distinguishing the difference between conventional and nuclear? Would the Navy endorse limits on conventionally armed cruise missiles?

On another related issue, is the U.S. Navy willing to consistently allow teams of Soviet inspectors on U.S. Naval vessel?

Answer: At the Washington Summit, both the U.S. and the Soviets agreed to work toward a mutual solution to limiting long range nuclear armed SLCMs.

However, verification remains to be the key issue regarding SLCM limitations. The Navy continues to seek effective verification measures but no satisfactory solution has been found. The 1985 Report to the Congress on Arms Control Limitation on Deployed Nuclear-Armed SLCMs and their Verification remains as an accurate and authoritative statement on the issue. The final conclusion of this report states:

[Deleted.]

Finally, it is in our best interest to preserve the flexibility afforded by both conventional and nuclear SLCMs. The Navy does not endorse limits on conventional SLCMs. These highly accurate and extremely effective systems significantly enhance our warfighting capability and should not be included as a part of the START Treaty.

SHIP MANNING

Question: According to the FY 1989 budget request, the Navy is projecting a net increase of ten ships above FY 1988 levels. This figure includes the reduction of 16 frigates and two submarines. In addition, the budget projects no growth in officer and enlisted personnel. How will the Navy efficiently operate ten new ships without additional personnel? Will manning on other ships be reduced? How will this effect ship readiness?

Answer: The FY88/89 President's Budget submission of

January 1987 requested a growth of 9600 active duty personnel in FY89. This growth included the manpower needed for ten new ships. In the FY89 Amended Budget Submission we have eliminated the 9600 end strength growth and are requesting the same end strength level that was authorized for FY88.

The reduction of 9600 end strength from our planned growth was achieved in a balanced manner by decommissioning 16 frigates (eight in FY88; eight in FY89), decommissioning the 14th Carrier Airwing and two SSBN. The FY89 Budget provides manning at 92 percent of requirements in combat forces to ensure adequate fleet readiness and sustainability. Navy has meshed personnel and program adjustments to ensure that the FY89 program is balanced and executable.

PERSIAN GULF OPERATIONS

QUESTION: The costs of operating our fleet in the Persian Gulf was estimated to run about $1 million to $2 million per day. I have seen reports indicating that countries in the Persian Gulf that directly benefit from our presence are helping us out to defer the overall cost. Can you be more specific as to who is assisting us with money, how much, and to what degree these countries are continuing to provide logistical support? Additionally, I understand that you have scaled-back our maritime forces in the Gulf. Can you give the Committee some idea of how many Navy and Marine personnel are currently present in the Gulf as compared to eight months ago?

Answer: None of the Persian Gulf countries are providing financial assistance, [deleted].

Question: "An informal DoD survey of 10 prime contractors averaging about 10 major projects, disclosed that nearly half of the projects had experienced cost or schedule problems because of inadequate subcontractor control. What specific steps has the Navy taken to ensure that its prime contractors provide more effective managment of their subcontractors?".

Answer: The Cost/Schedule Control Systems Criteria (C/SCSC) of Department of Defense Instruction 7000.2 as implemented in prime contracts by FAR 52.234-7001 is one of the principal tools the Navy uses to ensure sound subcontractor management by the prime contractor. For research and development subcontracts which are valued over $25 million and production subcontracts which are valued over $60 million, (if other than firm fixed price) validation of the subcontractor's C/SCSC system is required. Management of subcontracts under these dollar thresholds is performed within the C/SCSC material review process. Validation involves (1) examining the contractor's management control systems such as planning, work scheduling, budgeting, authorizing work, cost accounting and organizing; (2) periodic, objective statusing of planned work in order to determine actual work performed; and (3) associating budget with the work performed to produce an earned value.

A second step has been the Navy's implementation of the recently defined Material Requirements Planning (MRP) oversight program. This program, which has ten distinct criteria which must be met by DoD contractors to have acceptable systems, requires a 98% accuracy level in defining, budgeting and time phasing of materials and services obtained from major subcontractors.

A third step has been the Navy's use of Contractor Purchasing Systems Reviews (CPSRs). These reviews ensure that prime contractors implement purchasing systems which efficiently control subcontract costs/schedule performance. The Government evaluates and validates the prime contractor's purchasing system for materials and services, subcontracting and subcontract management from development of a requirement through completion of subcontract performance.

POST INF IMPACT ON ATLANTIC FLEET

Question. Realizing the sensitive nature of this topic, I wonder if you might address the requirement for the United States to increase its emphasis on the Atlantic Fleet given a post INF environment. I know that former Secretary Webb put a great deal of emphasis on the Pacific Fleet.What will Secretary designate William Ball's intentions and priorities entail?

Answer. The role of NATO's maritime forces and the contributions of those forces to NATO's nuclear and conventional deterrent posture will be critical in a post-INF environment. SACLANT forces (as an equal partner of SACEUR in the NATO Command structure) can contribute greatly to offset the very serious conventional imbalances on the ground in Europe. This can be done by looking for more effective and imaginative use of existing forces in the Atlantic. There should be no need to increase the Atlantic fleet, at the detriment of the Pacific fleet, to accomplish our goal of deterrence in that region. Deterrence is strengthened by our global and balanced disposition of naval forces, both in the Atlantic and the Pacific. Our forward maritime posture on both "fronts" has influenced Soviet perceptions and therefore has served as an effective deterrent.

The Soviet concern is reflected in a growing number of Soviet proposals to curtail naval activity, under the guise of "military detente", in northern European waters. These proposals are specifically directed at NATO's naval forces. This campaign must be countered to ensure our maritime strength is not weakened; we should not accept any limitations on our deterrent and warfighting capabilities.

QUESTIONS SUBMITTED BY SENATOR STEVENS

FUNDING FOR COAST GUARD DEFENSE ACTIVITIES

QUESTION: What is the status of the MOU between the Coast Guard and DoD for the transfer of $105 million in goods and services?

ANSWER: The Department of Defense, on 21 March 1988, forwarded to the Commandant of the Coast Guard a letter detailing the sources of the funds that would make up the transfer. Accounting procedures have been drawn up and are in the final stages of coordination. The Department expects to execute this transfer without a Memorandum of Understanding.

QUESTION: What is the total level of support provided to the Coast Coast Guard by the Department of Defense -- including Procurement, O&M, and R&D activities?

ANSWER: The Coast Guard will be provided a total of $105 million in supplies, fuel, training, and other operational support as shown below.

Appropriations	Amount
RDT&E	$ 5.0
Operations & Maintenance	26.7
Procurement	8.3
Military Personnel	1.5
Stock Funds	63.5
Total	$105.0

QUESTION: Would it be more useful to budget for all Coast Guard support provided by the Deptartment of Defense separately, rather than buried in other appropriation accounts (Congress provided for such a vehicle by creating the "Coastal Defense Augmentation" account.)

ANSWER: I respectfully defer this question to the Office of the Secretary of Defense.

A-6F/G PROCUREMENT ISSUES

QUESTION: What does the Navy plan to do with the $609.9 million provided by Congress for the A-6F program?

ANSWER: The Navy plans to procure A-6E/SWIP aircraft, restore long-standing logistics support/training deficiencies and continue A-6 upgrade development efforts with the $609.9 million FY 1988 APN-1 appropriation.

QUESTION: When do you project that the FY 1988 funds appropriated for the A-6 will be available to be obligated?

ANSWER: The Navy anticipates obligation of all FY 1988 support/logistics funding and additional obligation of the airframe contract this fiscal year.

QUESTION: How many A-6G aircraft do you propose to modify?
ANSWER: If a remanufacture program is decided upon, 167 aircraft will be upgraded.

QUESTION: What will be the annual procurement rate for the modification kits?
ANSWER: The A-6 upgrade program is currently under review and it is premature to lay out specific remanufacture (upgrade) profiles.

USS MIDWAY ISSUES

QUESTION: What are the current plans for continued service of the carrier "Midway"?
ANSWER: MIDWAY will complete a six month deployment to the Indian Ocean and Western Pacific in the spring of 1988. Her performance during this deployment has been exemplary. Earlier concern over problems with flight deck wetness and roll period have been judged to be not as critical as initially envisioned, and have been deferred.

Current plans call for MIDWAY to remain the forward deployed carrier homeported in Yokosuka, Japan until numerically replaced by CVN-74 in the 1996-1997 time frame.

QUESTION: When does the Navy plan to seek Congressional approval for the additional overhauls necessary to sustain flight operations on the "Midway"?
ANSWER: The Navy conducted a comprehensive study to identify solutions to flight deck wetness and roll excursions identified after hull blister modifications were completed in 1986. After some minor modifications and a period of observing the ship operating aircraft at sea, it has been determined that further modifications will be deferred.

QUESTION: Has the Navy addressed the issue of eliminating one or more aging carriers as a cost savings measure in the next two years?
ANSWER: Last fall the Navy conducted an exhaustive study of the costs associated with early retirement of two of our older carriers. The following is a synopsis of that study:

-- Deactivation of USS CORAL SEA and USS MIDWAY in FY-90 and FY-92 would result in savings of approximately $1.3B in FY-88 dollars. These are savings in direct costs (personnel and O&S costs). Indirect costs were not considered.

-- Aircraft requirements associated with early CV retirements would remain the same. This will allow for wing modernization to continue and will decrease the average age of our A/C.

-- Manpower end strength savings would amount to 5000 officer and enlisted billets each year. It is assumed these billets would be used to fill other manpower deficiencies within the Navy community.

Navy force structure planning is based on providing the requisite warfighting capability to execute the CINC's war plans at an acceptable level of risk. The national requirement for carrier battle groups to support these plans with minimum risk is a classified number, well in excess of 15. Numerous joint staff and service studies and analyses, as well as wargaming results, have shown that 15 is the minimum number that prudent risk will allow.

Without a corresponding reduction in peacetime global carrier commitments, the absence of MIDWAY and CORAL SEA will require that other carriers cover their commitments. The impact of this would be felt immediately, since CORAL SEA is presently scheduled to deploy to the Mediterranean in mid-1989 and the present global carrier deployment, overhaul, and carrier service life extension program schedules would have to be adjusted. Our analysis has indicated that early retirement of MIDWAY and CORAL SEA will not appreciably reduce the direct operations and maintenance cost of global carrier battle group operations, since the fuel and spare parts consumption by the remaining carriers will be increased. The relatively small savings realized would not offset the adverse impact on readiness and personnel.

Very few other force requirements have received the extensive study and analysis that the carrier battle groups have. A 15 deployable carrier battle group Navy is the floor, not a ceiling.

QUESTION: Which carriers in the present fleet are the most costly for you to operate?

ANSWER: The NIMITZ Class CVN's are the most costly to operate and the most effective. They carry 90% more aviation fuel and 50% more ordnance than a comparable size conventional carrier; they cut the logistic umbilical and can provide an immediate response to contingency requirements without waiting for a logistics train; and they are overall our most capable, survivable aircraft carriers.

V-22 OSPREY ISSUES

QUESTION: What is the status of the development effort of the V-22 Osprey?

ANSWER: Final assembly of the first FSD aircraft is underway, with first flight planned this summer. The engine manufacturer (Allison) has delivered the engines for the ground test article and aircraft #1 to the airframe manufacturer (Bell/Boeing). The fuselage for aircraft #1 has been delivered to the Bell Helicopter Facility for mating with the wing/nacelles, and start of ground testing prior to first flight. The 34 foot fuselage test article is currently undergoing static testing, and the flight control systems integration rig is in operation.

QUESTION: What is the planned annual procurement rate for the V-22 in the outyears?

ANSWER: The planned annual procurement quantities are under review by the Department of the Navy at this time.

QUESTION: When will the Navy make a decision for its next generation ASW aircraft between the SV-22 or some variant of another plane?

ANSWER: The Navy continues to evaluate several alternatives aimed at meeting sea-based air ASW and other missions requirements. We will keep you informed on the results of our evaluations.

QUESTION: If the Navy were to choose the SV-22, how would that reduce unit costs for the entire Osprey procurement?

ANSWER: Procurement of 300 SV-22 aircraft would reduce the average unit fly-away cost of the 657 V-22 aircraft program by approximately $100,000.00. The reduction in unit cost due to the additional quantity is low because over two-thirds of the ASW aircraft would be procured after the basic V-22 buy is complete.

ALASKA

Question: Stemming from your examination of options to station ships in Alaska, the Navy announced last month that environmental impact reviews are now underway. Assuming the most favorable scenario when do you expect deployment to occur?

Answer: The Commander in Chief Pacific Fleet has been requested to conduct an analysis of the potential of basing ships in Alaska. This analysis will evaluate the strategic and operational value of basing ships in Alaska. A parallel engineering study to determine the capital and operational cost of basing ships in Alaska will also be performed. If a decision is made to proceed beyond the strategic/operational and engineering analysis, environmental documentation required by the National Environmental Policy Act will be initiated.

Question: Clearly, the State of Alaska's offer to assume the cost of naval station infrastructure was a significant factor in your decision. What is your estimate for desired facilities?

Answer: Facility requirements and associated cost estimates that could ensue from ship basing in Alaska have not been estimated.

Question: The State of Alaska's financial commitment may well set a precedent for deployment strategies. Is this an option you'd consider for future NATO negotiations?

Answer: Any state or local government funding commitments for establishing military missions in Alaska can not be related in any useful way with future NATO negotiations.

QUESTIONS SUBMITTED BY SENATOR MCCLURE

NEW PRODUCT TANKERS

QUESTION: Section 8098 of the FY 88 Continuing Resolution provided authority to proceed with a charter program for up to six newly built product tankers.
a) What is the status of this program?
b) Will you complete this program in FY 88 or will similar language be required in the FY 89 appropriations bill?

ANSWER: We are currently reassessing our need for tankers for both peacetime and wartime use. We expect to finish our assessment by this summer. At that time we will be in a position to recommend any specific tanker acquisition programs.

Competion for Repair Work

Senator McClure: Is the Marine Corps planning to utilize public/private competitions between government and privately-owned repair facilities to reduce repair costs, for example for wheeled and tracked vehicles and Marine Corps helicopters? If not, why not?

Answer: The Marine Corps' depots which repair/rework ground equipment do not have any multi-year workload of the magnitude required for competition that is above their core requirements. The response on Marine Corps helicopters is deferred to the Navy (OP-514) as helicopters are repaired at Naval Aviation Depots.

EARLY RETIREMENT OF 16 FRIGATES

QUESTION: Did DoD consider recent and current ship modernization and overhaul investment in selecting ships for retirement?

ANSWER: Yes, considerations was given to the modernization and overhaul status of those ships considered for retirement.

NAVY FRIGATE RETIREMENTS

QUESTION: What FY 1988 funds were planned to be spent to modernize or overhaul frigates now scheduled to be decommissioned?

ANSWER: The following FY 1988 funds were programmed for modernization at the time of the FY 1989 budget submission: FFG 2, Phased Maintenance Availability, Pacific Fleet, $0.6M; FF 1048, Phased Maintenance Availability, Pacific Fleet, $0.44M; FF 1049, Regular Overhaul, Atlantic Fleet, $1.7M

QUESTION: What efforts are underway to recover or stop modernization activities for the frigates to be decommissioned?

ANSWER: Within the constraints of contractual requirements no new work or growth is being allowed on those ships currently in availabilities.

QUESTION: Given the on-going work on these vessels, how firm are you on retiring these ships?

ANSWER: Program budget decisions have reduced the Navy's overall level of funding and thus have required reductions in Navy programs. The early retirement of 16 active force ships was decided on only after considering closely the savings that would result over the next few years.

QUESTION: What other vessels were considered for retirement by the Navy in FY 1989?

ANSWER: The DDG 2 and DDG 37 class ships were also considered for retirement during the review of possible savings options.

QUESTIONS SUBMITTED BY SENATOR KASTEN

MHC SHIPBUILDING PROGRAM

QUESTION: On September 29, 1986 the Navy submitted a report outlining that the MHC lead ship would be awarded to a U. S. division of Intermarine on a sole source basis in order to obtain proven design. Information coming out of the Contract Design Phase raises serious concern that the current ship design is very different from the intended design.

Has the MHC's growth in size caused it to be less capable in the shallow water end of its low mix coastal mission?

ANSWER: The MHC 51 design remains unchanged from that planned at program inception and is based on the proven LERICI class and variantes built by Intermarine now in service with foreign navies. The ship characteristics and capabilities comply with the Navy operational and design requirements as stated in the MHC 51 Class Top Level Requirements. The ship did increase somewhat in displacement during contract design; however, it is expected that a ship will increase in weight during this design period. This additional weight is acceptable with regard to the operational requirements for the ship.

QUESTION: I understand that the MHC design is well behind the original schedule and that cost growth is reported to be significant?

What effect will this have on awarding follow-on ships in FY-89?

ANSWER: The MHC design is on schedule to support the planned start of construction, May 1988, and the scheduled delivery date of April 1991. The contract price of MHC 51 has not yet been established. The contract is currently limited by a termination liability funding ceiling. Intermarine is preparing their price proposal for the ship. The budget is based on the Navy's estimate for the ship and we have no reason to doubt its validity.

At this time, there is no delay on awarding the FY-89 ships. However, Intermarine's proposal for the lead ship and the subsequent negotiations may impact the schedule for issue of the RFP and award.

QUESTION: Is ther enough funding in that year to fully fund both ships?

ANSWER: Based on the Navy cost estimates done for the MHC, the budgeted FY-89 funding is adequate to fully fund the two FY-89 ships.

MINE COUNTERMEASURES SHIPBUILDING PROGRAM

QUESTION: There has been much discussion over MCMs, MHCs, and YPs. Which of these three ships is he ship of the future for mine countermeasures? If not what is?

ANSWER: Both the MCM and MHC are state-of-the-art mine countermeasures ships that were designed for a specific need. The MCM, while being able to conduct port break out and clearance operations, has the ability to deploy and perform an open ocean mission which is considered essential to maintaining safe SLOCs. The MHC was designed for use in a coastal and harbor clearance role to clear these areas and then ensure that they remain safe. As such these ships can operate with only 59 percent of the crew needed for the open ocean mission of the MCM. The YP craft has a peacetime route survey mission and can be outfitted and used in the event of a national emergency to assist and augment both the MCM and MHC to provide fro quicker port breakouts and ensuring Q-Routes remain clear.

SEALIFT CAPABILITY

QUESTION: In the past year there has been much discussion regarding the status of our sealift capability.

Would you explain the responsibility the Navy has to provide ships to resupply our forces if there was a conflict in Europe or somewhere far away in the Pacific?

ANSWER: The Navy has the responsibility to provide the shipping to resupply our forces during conflict anywhere in the world. The Navy relies principally on non-organic sources for such shipping - the active U.S. flag merchant marine, the National Defense Reserve Fleet and Ready Reserve Force of the Transportation Department, other U.S. privately owned merchant ships and, in some scenarios, the merchant shipping of our allies.

QUESTION: Do we have that capability now?

ANSWER: Our present capability falls short of the desired level of capability in overall assured shipping capacity, types of ships and rapidity of ship availabilities.

SEALIFT DEFICIENCIES

QUESTION: What relationship or agreement is there between the Navy and the Maritime Administration with regard to addressing our sealift deficiencies?

ANSWER: Navy and the Maritime Administration work closely on a day to day basis. Navy is responsible for execution that cannot be met using organic assets. The Maritime Administration is responsible for the provision of U.S. merchant shipping equal to the requirements so stipulated. A formal memorandum of agreement governs the use of the most rapidly available merchant shipping - the Ready Reserve Force.

QUESTION: In some of your recent statements you have said that this is a national problem. What do you prescribe to be the national solution?

ANSWER: Since the bulk of our sealift requirements have been met traditionally by the U.S. merchant marine, its health and capability is of paramount importance. A robust merchant marine is vital to our sealift responsibilities, and of equal importance in our view, is vital to the continued economic and political well being of our country. There is agreement on the need for a healthy and robust merchant marine; the specific steps necessary to maintain is heath are yet to be determined, but recent actions such as those of the Commission on Merchant Marine and Defense have helped focus attention on the need to address the question on a priority basis.

QUESTIONS SUBMITTED BY SENATOR D'AMATO

A-6F/G PROCUREMENT ISSUES

QUESTION: I understand the Navy is planning to use the 1988 funding for A-6Fs provided in the continuing resolution for the production of 6 to 12 A-6Es FY '88 and '89. The balance of the money will go toward research and development into an A-6G, which is an A-6 that incorporates some of the A-6F technology. The Navy plans to buy 164 A-6Gs, all remanufactured.

The result of this is that the A-6 production line will shut down after the fiscal year 1989 buy. Don't you think it would be wiser to fund the production of some new A-6Gs, perhaps 6 or so a year, to keep the production line warm, in case we need to ramp up in an emergency?

ANSWER: In view of fiscal contraints on all Navy APN funding, we plan to procure some A-6E SWIP aircraft to be delivered over a two year period in order to keep the production line operating at the minimum sustaining level in case we need to mobilize and to fill inventory shortfall.

QUESTION: Does the Navy have enough A-6 aircraft for our carrier fleet? If the Navy remanufactures all 164 A-6s, won't that exacerbate a shortfall in the A-6 inventory?

ANSWER: The Navy has adequate numbers of A-6 aircraft to fully man our deployed carrier forces. The remanufacture program will be performed in conjunction with the regularly scheduled depot level maintenance cycle, therefore, little, if any, impact is anticipated on the A-6 inventory.

IMPACT ON DRUG INTERDICTION OPERATIONS OF RETIRING 16 FRIGATES

Question. The Navy has decided to decommission 16 frigates from the Atlantic and Pacific fleets over the next 2 years for a savings of $166 million. I understand that the mission of 8 of these ships which operate in the Caribbean is drug interdiction. Is this true?

Answer. The U.S. Coast Guard has statutory responsibility for maritime interdiction and military units do not directly participate in law enforcement operations; thus, drug interdiction is not a mission of the frigates scheduled for decommissioning. The frigates have been scheduled, when operationally feasible, among the other surface combatants considered suitable as platforms from which Coast Guard boarding teams operate to perform drug interdiction operations.

Question. Under Secretary Taft recently testified before this committee that the Navy has substantial commitment, through operation Hat Trick, to drug interdiction efforts in the Caribbean. How does the Navy expect to maintain or increase its commitment to this mission by eliminating some of the vital assets?

Answer. The Navy will continue to work closely with the Coast Guard through the quarterly fleet scheduling conference to ensure that individual ship schedules are optimized to support drug interdiction operations. Careful scheduling can compensate in some measure for the loss in flexibility caused by reduced strength and budget shortfalls. Innovative operational measures, such as the use of hydrofoil patrol craft (PHMs) forward deployed to bases in the Caribbean with Coast Guard TACLETs embarked, and more effective use of ships of opportunity also contribute to increased mission support. The Navy's ship sighting and reporting program through which all maritime and air units operating in drug-threat areas report locations of suspect vessels provides vital intelligence for more effective use of drug interdiction resources. U.S. Navy biliteral and unilateral operations with Caribbean navies promote international cooperation between western hemisphere governments.

SUBCOMMITTEE RECESS

Senator JOHNSTON. The subcommittee will now recess subject to the call of the Chair.]

[Whereupon, at 11:33 a.m., Tuesday, March 22, the subcommittee was recessed, to reconvene at the call of the Chair.]

DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1989

WEDNESDAY, MARCH 23, 1988

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10:36 a.m., in room SD–192, Dirksen Senate Office Building, Hon. Jim Sasser presiding.

Present: Senators Sasser, DeConcini, Stevens, D'Amato, and Cochran.

DEPARTMENT OF DEFENSE

DEPARTMENT OF THE ARMY

STATEMENT OF HON. JOHN O. MARSH, JR., SECRETARY OF THE ARMY

OVERVIEW OF ARMY BUDGET REQUEST

OPENING STATEMENT OF SENATOR SASSER

Senator SASSER. The subcommittee will come to order.

Today the Defense Appropriations Subcommittee will hear from the Secretary of the Army, the Honorable John O. Marsh, Jr., and the Chief of Staff of the Army, Gen. Carl E. Vuono, on the Army's fiscal year 1989 budget request.

The members of the subcommittee welcome you, Mr. Secretary, and you, General, and we are looking forward to your presentation today.

I would like to say on behalf of the distinguished chairman of our subcommittee, who is necessarily absent today, that the committee is very aware of the extraordinary effort that you and your staffs have put forth in order to completely revise your fiscal year 1989 budget request in just 8 short weeks.

I know I speak for the chairman and the other members of the subcommittee when I say that we are aware you missed many holidays, you worked many late nights putting the effort into this very important endeavor, and I wish to express our appreciation to you, Mr. Secretary, and to you, General, and to your staffs for these splendid efforts.

BUDGET LEVELS

As a result of the budget summit agreement between the congressional leadership and the President, the fiscal year 1989 national defense levels have been set at $299.5 billion, necessitating a 10-percent reduction from the levels that were originally proposed by the administration.

Because of the commendable desire to protect conventional forces and the fact that the Army's modernization efforts have lagged behind those of the other services, Secretary Carlucci I think has quite rightfully—and I applaud his effort on this part—allocated the smallest percentage of this reduction to the Army. That is good news for the Army and, quite frankly, speaking for this Senator, I think it is good news for our national defense.

AMENDED FISCAL YEAR 1989 BUDGET

But the bad news is the amended fiscal year 1989 Army budget request represents a negative real growth of 1.6 percent, compared to the fiscal year 1988 Army budget approved by Congress last December.

In order to accommodate this reduced purchasing power, the Army has chosen to: (1) reduce active duty end strength by about 8,600 soldiers, necessitating a reduction in active force structure; (2) reduce civilian and selected reserve end strengths by 36,569 positions; (3) fund depot maintenance for major end items at only 68 percent of requirements; (4) slow the planned increases in wartime sustainability; (5) slow funding for the backlog of maintenance and repair on our fixed facilities and military housing; and (6) terminate some programs, including the Aquila remotely-piloted vehicle, the 120-mm mortar, the M–198 Howitzer, the antitactical missile and the Copperhead artillery round programs, defer the LHX helicopter, defer the advanced antiarmor weapon, heavy, also defer our armored family of vehicles, Army data distribution system, and the forward area air defense command, control, and intelligence program.

There have been reports of concerns expressed by the service secretaries about some of the choices that have been made in this budget scrub. We look forward today, Mr. Secretary, to your views on why you selected these choices and also that of the Chief of Staff, and look forward to your views on how you will operate within this reduced fiscal requirement.

Before I ask for your statements, gentlemen, I would like to call upon the distinguished ranking member of this subcommittee, Senator Stevens of Alaska, for any opening remarks he might wish to make at this time.

Senator Stevens.

CHANGES IN ARMY STRUCTURE

Senator STEVENS. Mr. Chairman, I would just ask to put my opening statement in the record. As I indicated in the statement, I do not fully agree with what has been done, but I have got to admire both of you for the decisions you have made in following through on a very difficult process.

I have reviewed your testimony. I am just reviewing this book. I think it highlights the changes in the Army as a result of the leadership that you have shown, Secretary Marsh and General Vuono—you and your predecessors. We do have a different Army; the more I have to do with it, the more I realize that—90 percent high school graduates, over 50 percent of them married. They are a stable group and an alert and ready group.

I have enjoyed the trips I have taken to be with them on various maneuvers and exercises. Based upon my own experience back in the days when I was in the Army, I know this group is ready and they are a different group now. So we owe you both a debt of gratitude. The country as a whole does.

PREPARED STATEMENT

Mr. Chairman, I would like to put my statement in the record, as I said. I have some questions for the record from Senator Kasten that he would like to have responses to. I ask that they be included in the record.

Senator SASSER. Your statement will be included in the record, Senator Stevens, as if read, as will the questions of our distinguished colleagues.

[The prepared statement of Senator Stevens follows:]

PREPARED STATEMENT OF HON. TED STEVENS

U.S. SENATOR FROM ALASKA

Mr. Chairman, thank you for calling a hearing this morning to receive testimony on the Department of the Army's fiscal year 1989 budget request. A total of $75.2 billion is requested for programs and activities covered under the Defense appropriations bill. The Army also seeks $2.8 billion for family housing and military construction related appropriations.

Total Army request, if enacted, would yield a real decline of 1.6 percent relative to the fiscal year 1988 appropriated levels. While this is the first proposed reduction for Army budgets during this administration, it does represent the extent of reductions required to comply with the budget deficit reduction summit agreement achieved last fall.

The challenge we face this year is to avoid a reversal of the significant gains made in the recent past. I don't agree with all the proposed cuts recommended in this budget, but I recognize that such cuts are necessary if Congress is to uphold its end of the bargain on the budget summit agreement. Some of these recommendations even hit a little to close to home for my liking, particularly rephasing of troop deployments scheduled for the 6th Light Infantry Division in Alaska. While I am not particularly happy about these proposals, I also recognize the severity of the budget problems we are facing.

Secretary Marsh, General Vuono, welcome before the subcommittee. While I do not fully agree with the process which has forced you to make some of these tough budget tradeoff decisions, I do admire the even-handed and fair manner which you both attempted to display in order to reach these difficult targets. I look forward to your testimony.

PREPARED STATEMENT

Senator SASSER. Senator D'Amato, do you have a statement at this time?

Senator D'AMATO. Mr. Chairman, I would like to request that I likewise be permitted to submit my statement as if read in its entirety, and I also have questions I would like to submit for the record.

It is certainly good to see our good friend, Secretary Marsh, and the Chief of Staff and General Pihl.

Senator SASSER. Your statement will be included in the record.

[The prepared statement of Senator D'Amato follows:]

PREPARED STATEMENT OF HON. ALFONSE D'AMATO

U.S. SENATOR FROM NEW YORK

Mr. Chairman, I welcome to this hearing the Secretary of the Army, John O. Marsh, and the Army Chief of Staff, Gen. Carl E. Vuono. I believe that this is General Vuono's first appearance before this committee as Chief of Staff and I welcome him.

For fiscal year 1989, the Army has requested $78 billion. This is over $2 billion below the request for fiscal year 1988, and 1.6 percent real reduction from this current fiscal year. This will be the fourth year in a row that the Army budget has declined in real terms.

While Federal dollars for defense become more scarce, the requirements of our national security grow. This is particularly true for the Army. The chief threat to our national security remains the Soviet Union's expanding military influence and capability, particularly in Europe. The Soviet Union's ground forces significantly outnumber those from the United States; Warsaw Pact forces outnumber those of NATO allies.

This discrepancy in conventional force balance in Europe has become more critical in light of the prospective Intermediate-Range Nuclear Forces Treaty between the United States and the Soviet Union. I support the treaty because it raises the nuclear threshold in Europe. The treaty does, however, place an increased burden on our conventional deterrence.

The increased reliance on conventional forces in Europe, the ambitious program of military assistance by the Soviet Union to third world nations, and Soviet assistance to surrogate forces around the world pose new and formidable challenges to the United States.

To help meet this challenge, the Army has undertaken a program to achieve a proper balance of heavy and light forces. Part of this modernization effort resulted in the creation of five new light infantry divisions.

With the light infantry division initiative, the Army is increasing its strategic flexibility. Modernization of light forces is essential for readiness to respond to a broad spectrum of threats. These forces will be able to deploy roughly three times faster than the standard infantry division, increasing the Army deterrent and war-fighting capabilities. One such division, the 10th Mountain Light Infantry Division, is located in upstate New York at Fort Drum. I am pleased that the Army is continuing to follow this prudent course of action to help counter the growing Soviet threat in the many troubled regions of the world.

I look forward to working with you, Mr. Secretary, and with General Carl Vuono, as we continue the Army's strategic modernization program in fiscal year 1989.

Thank you, Mr. Chairman.

INTRODUCTION OF ASSOCIATES

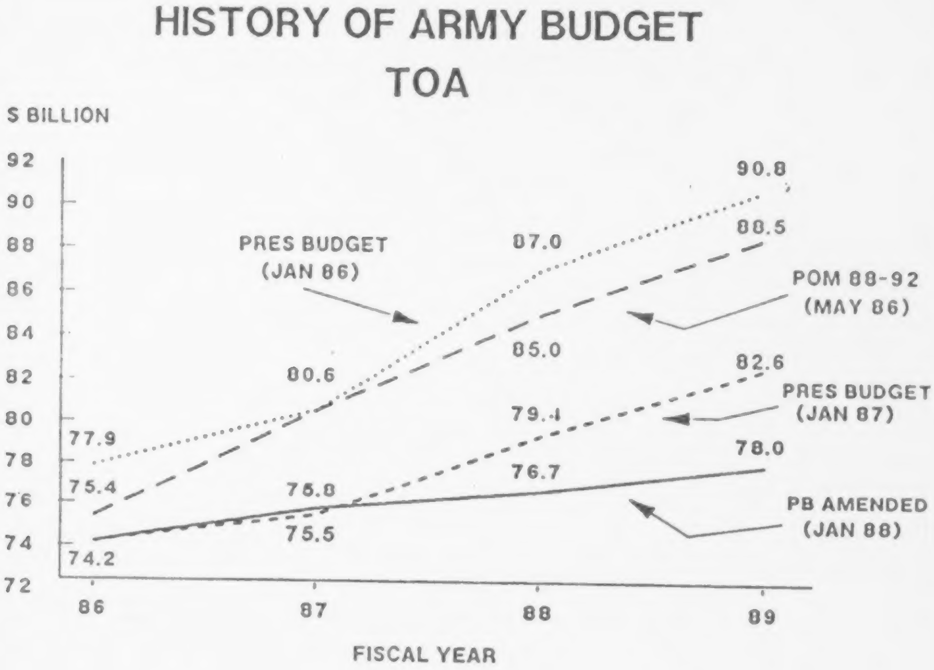
Senator SASSER. Mr. Secretary, we turn it over to you now, as you wish to proceed, and perhaps we might begin by introducing the officers accompanying you for the record.

Secretary MARSH. Mr. Chairman, I request permission to file my statement in the record and to summarize it.

With the Chief of Staff and myself today are General Pihl, Military Deputy to the Assistant Secretary of the Army for Research, Development and Acquisition, and Director of the Army Budget, General McCall.

Senator STEVENS. Mr. Chairman, I failed to note that General Vuono is going to Fairbanks this weekend, and I have got to tell you an old Alaska saying—that our best friends visit us in the wintertime. So I congratulate you for coming when the snow is still on the ground.

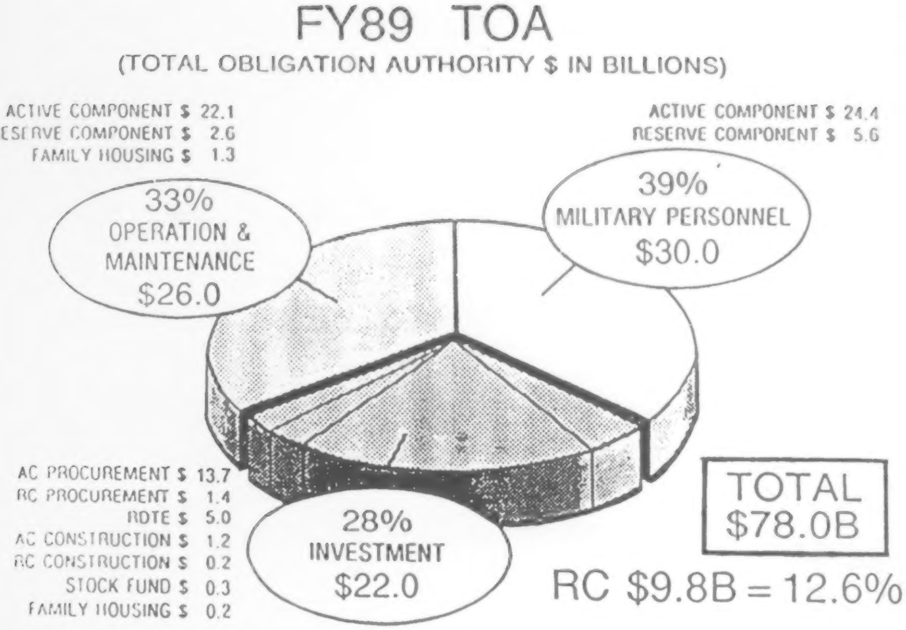
Secretary MARSH. It is a pleasure to be here, Senator, with the Chief. I can tell you that General Vuono is following in the tradition of a long line of very distinguished military leaders and has been enormously helpful the last 8 or 9 months.



SLIDE 1

ARMY FUNDING

I will just summarize where we are, how we got here, and where we hope to go. I simply point out that you have a reduced level of projected Army funding in the President's budget, if you look back several years ago, and where we are now, at $78 billion, which is our request.

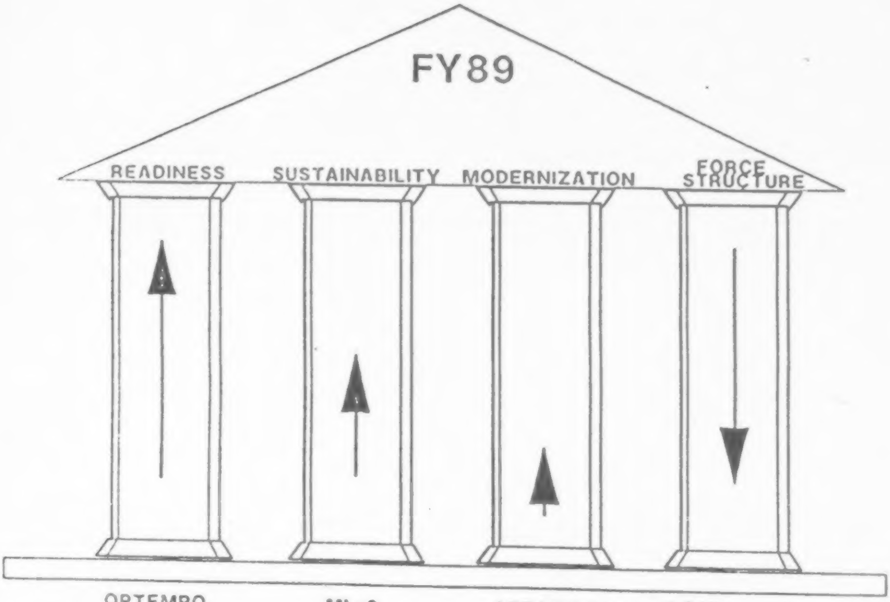


SLIDE 2

BUDGET BREAKDOWN

Now, to give you some idea of that in the budget pie, of that $78 billion, 39 percent will go into personnel, 33 percent to operations and maintenance, 28 percent to investment.

I call to your attention this figure here, almost $10 billion going to the National Guard and Reserves. This is direct funding for those two organizations. Actually, we estimate that there is a minimum of $2 billion to $2.5 billion more. You are really looking at about $12 billion, and about 15 percent.



FY89

READINESS

SUSTAINABILITY

MODERNIZATION

FORCE STRUCTURE

OPTEMPO
GROUND 850 MILES
AIR 15.8 HRS/MO
AC PERSONNEL 772.3

MI +0
SI +1
MUNITION +2

ABRAMS (M1A1)
BRADLEY
MLRS
PATRIOT
APACHE/AHIP
5 TON TRUCK

LOST
8600 AC END STRENGTH
- 1 BDE OF 3 BN's
- 2 BN'S
- TDA REDUCTIONS
- A/C 620

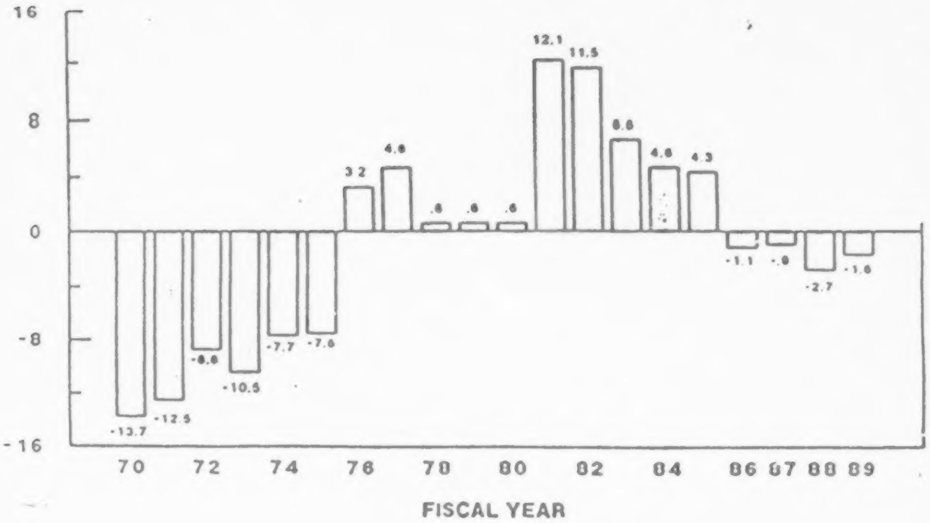
SLIDE 3

PILLARS OF DEFENSE

Now if you were to look at the four pillars of defense, you would see that in readiness in 1989 we are trying to plus that up, OPTEMPO is up. Sustainability is up some. Modernization is up slightly. Force structure, as you noted in your statement, is down.

ARMY REAL GROWTH TRENDS

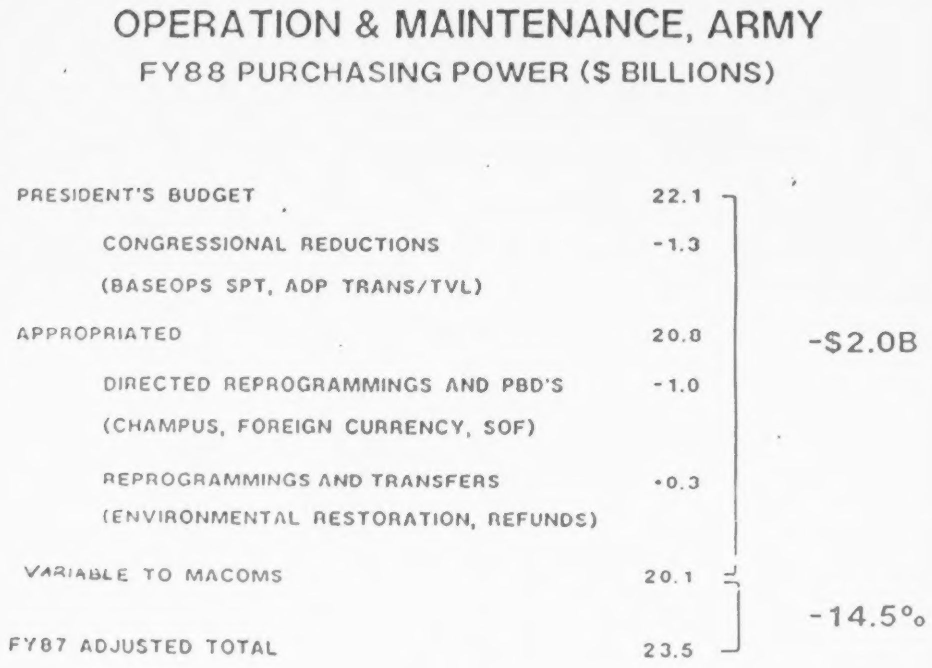
(%)



SLIDE 4

REAL GROWTH

If you were to look at the real growth figure that you cited, you see negative real growth of 1.6 percent for 1989.



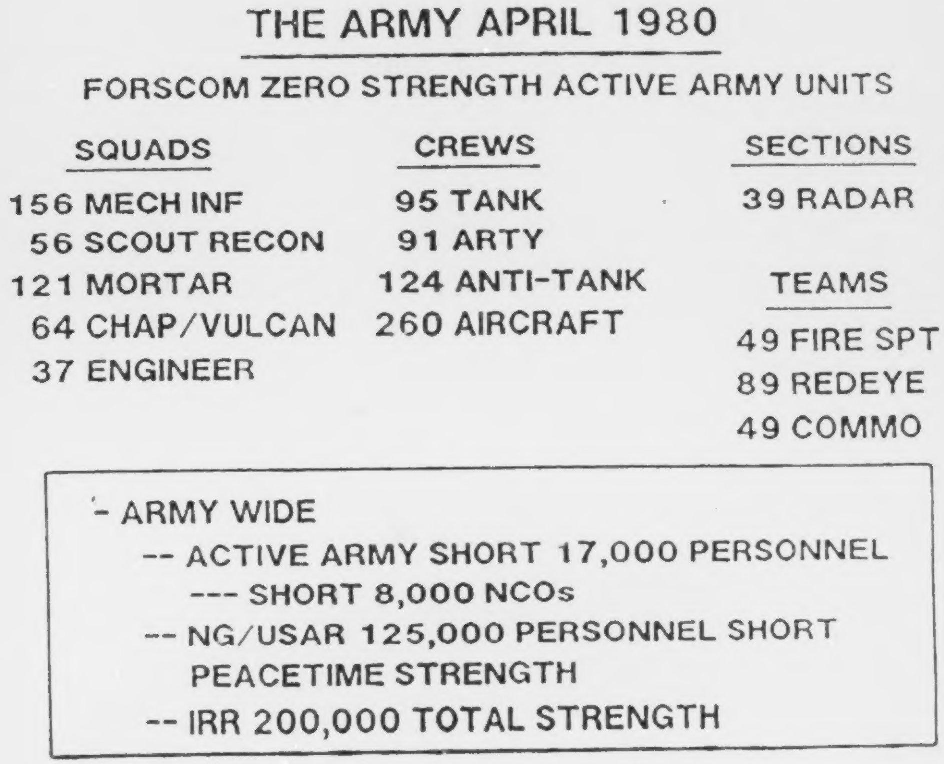
OPERATION & MAINTENANCE, ARMY
FY88 PURCHASING POWER ($ BILLIONS)

PRESIDENT'S BUDGET	22.1	-$2.0B
CONGRESSIONAL REDUCTIONS (BASEOPS SPT, ADP TRANS/TVL)	-1.3	
APPROPRIATED	20.8	
DIRECTED REPROGRAMMINGS AND PBD'S (CHAMPUS, FOREIGN CURRENCY, SOF)	-1.0	
REPROGRAMMINGS AND TRANSFERS (ENVIRONMENTAL RESTORATION, REFUNDS)	+0.3	
VARIABLE TO MACOMS	20.1	-14.5%
FY87 ADJUSTED TOTAL	23.5	

SLIDE 5

O&M ACCOUNTS

Now, if you were to look at an area that is particularly troublesome, it would be in the O&M accounts. In operation and maintenance for fiscal year 1988, we had a $22 billion request that was decremented $1.3 billion by the Congress. We had available $20 billion for operation and maintenance, and we are having some problems in 1988 as opposed to 1989. And that is the reason that we have been so interested in this transfer authority.



THE ARMY APRIL 1980

FORSCOM ZERO STRENGTH ACTIVE ARMY UNITS

SQUADS	CREWS	SECTIONS
156 MECH INF	95 TANK	39 RADAR
56 SCOUT RECON	91 ARTY	
121 MORTAR	124 ANTI-TANK	TEAMS
64 CHAP/VULCAN	260 AIRCRAFT	49 FIRE SPT
37 ENGINEER		89 REDEYE
		49 COMMO

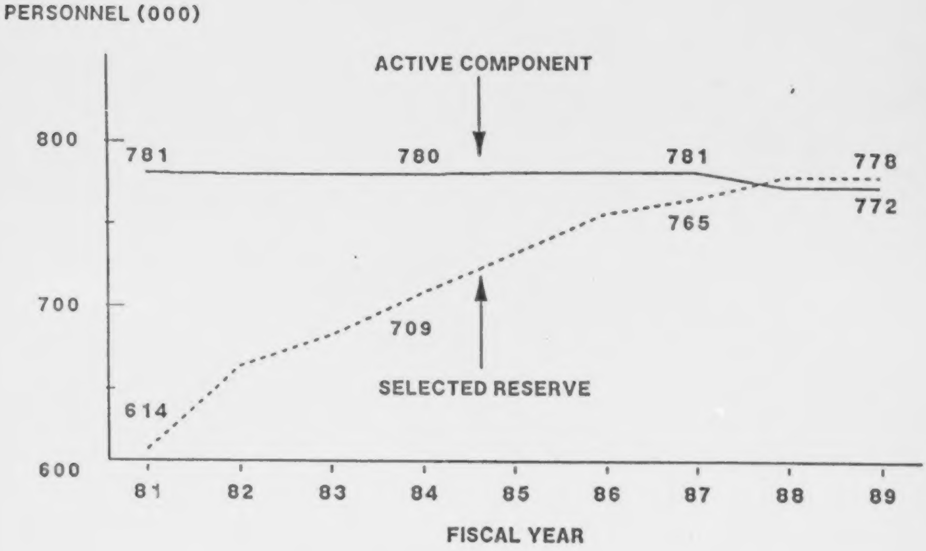
- ARMY WIDE
  -- ACTIVE ARMY SHORT 17,000 PERSONNEL
    --- SHORT 8,000 NCOs
  -- NG/USAR 125,000 PERSONNEL SHORT PEACETIME STRENGTH
  -- IRR 200,000 TOTAL STRENGTH

SLIDE 6

SHORTAGE IN 1980

To look at where we were, I would point out to you that in 1980 we had these numbers of squads that were empty in the Army: 156 mechanized infantry squads, for example, 121 mortar squads, 95 tank crews, and 124 antitank crews. We had shortages of 17,000 Active Army personnel and 8,000 NCO's. In the National Guard and Reserve we were short 125,000.

STRENGTH OF ARMY



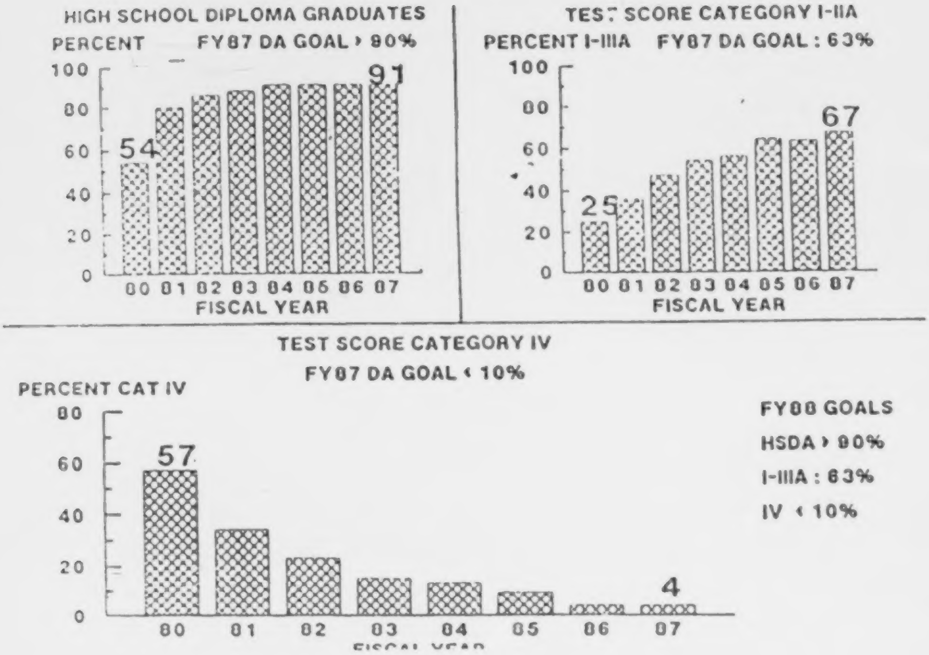
SLIDE 7

1980 TRENDS CORRECTED

If you look at the Army today, you see many of these trends have been corrected. I pointed out to you the Guard and Reserve growth for the last 6 or 7 years. Today there is one soldier in the National Guard or Reserve for every soldier that is on active duty.

You have capped end strength of Guard and Reserve; now that accounts for the 26,000 reduction in the Reserve Components. The Active Army end strength will be 772,300.

ACTIVE COMPONENT ACCESSIONS



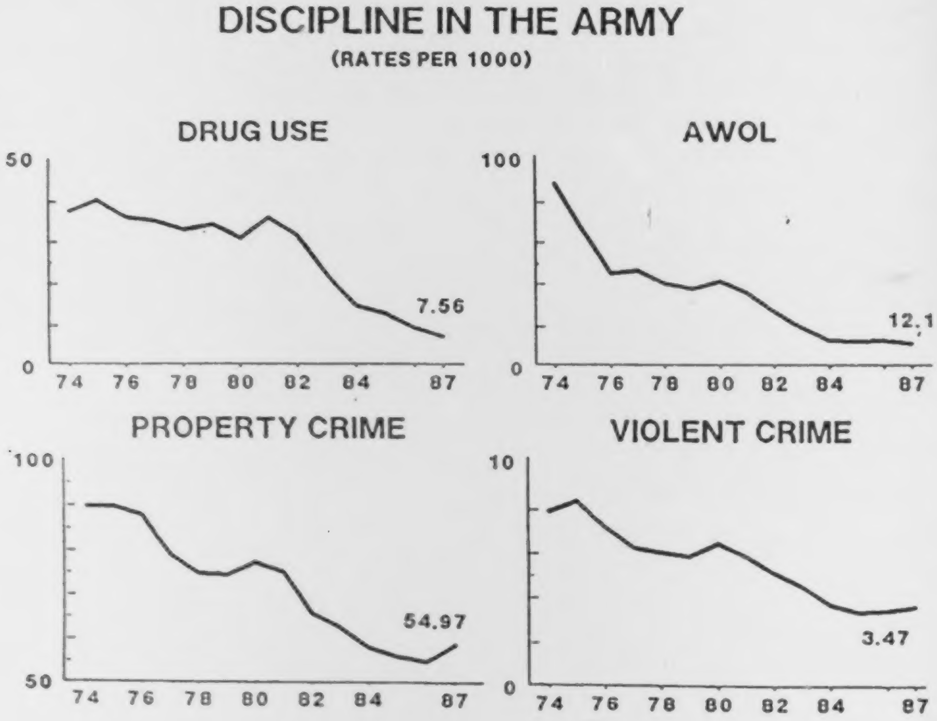
FY88 GOALS
HSDA > 90%
I-IIIA : 63%
IV < 10%

SLIDE 8

PEOPLE PROGRAMS

Now the strength of our program, of course, is our people, and reference was made by Senator Stevens to the high school graduate content of the Army. I would tell you that we are recruiting this year well in excess of 90 percent who are high school graduates. Less than 5 percent will qualify in category IV of the Armed Forces Qualification Test. This is reflected in their job performance and in their skills.

I would also mention that only 72 to 75 percent of their peers in civilian life are high school graduates.



SLIDE 9

This is reflected in reduced drug use; AWOL, violent crime, and property crime are all dramatically down.

[Clerk's Note: Slide 10 is not reproducible, and has been deleted from the record.]

COMPETITION RESULTS

This is why we have emphasized the 4.3-percent pay increase for our soldiers. These kinds of statistics reflect the quality of our people.

There is an international world helicopter championship that is held for both civilian and military. The U.S. Army helicopter team won it, both civilian and military—an active duty team. Incidentally, the ground support team consisted of National Guardsmen.

In 1987, the U.S. Army won the prestigious Canadian Cup, the great armored trophy that is competed for biannually in Europe, and we also for the first time in the same year won the Boeselager Cup.

Senator SASSER. Mr. Secretary, are those awards for tank operations—those last two awards? Are they for tank operations?

Secretary MARSH. One is for tank firing and gunnery. The Boeselager is for armored reconnaissance. General Vuono might want to speak to that.

General VUONO. For reconnaissance, but the first one, the Canadian Cup, is strictly tank maneuver and firing.

Senator SASSER. If I might just interrupt once, how long has it been since we won the Canadian Cup?

General VUONO. We have never won the Canadian Cup.

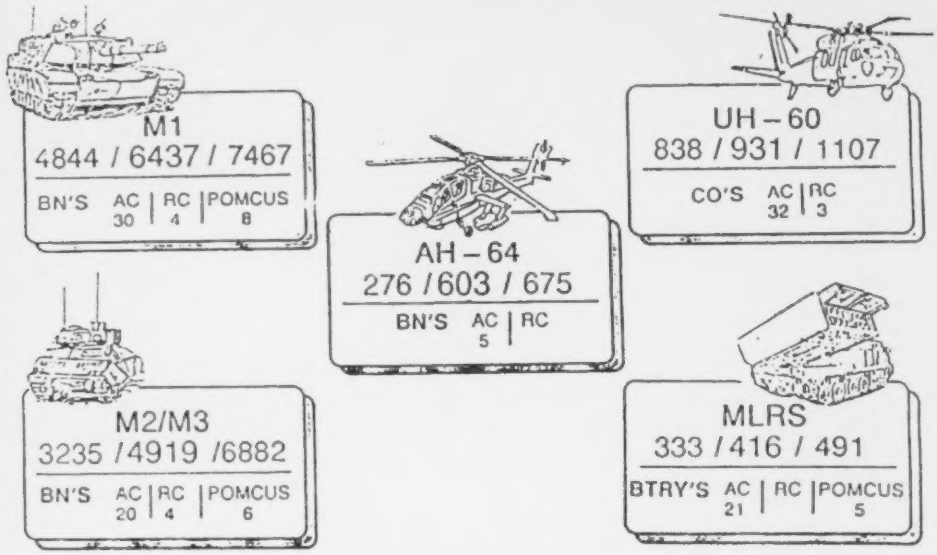
Senator SASSER. Who generally wins that—the Germans?

General VUONO. It varies. The Germans have won it several years, as have other countries, but it is the first time we have won it.

Secretary MARSH. And we won the Boeselager.

COMBAT IMPROVEMENTS

(ON HAND 87 / PAID FOR 88 / GOAL)



M1
4844 / 6437 / 7467

BN'S	AC	RC	POMCUS
	30	4	8

UH – 60
838 / 931 / 1107

CO'S	AC	RC
	32	3

AH – 64
276 /603 / 675

BN'S	AC	RC
	5	

M2/M3
3235 /4919 /6882

BN'S	AC	RC	POMCUS
	20	4	6

MLRS
333 / 416 / 491

BTRY'S	AC	RC	POMCUS
	21		5

SLIDE 11

WEAPON SYSTEM FUNDING

Now, to give you some idea, Senator, this is where I think you all could take particular pride in what you have done. You have funded us and authorized us to procure 6,437 tanks against a goal of 7,400. We actually have on hand almost 5,000 tanks and another 1,500 or 1,600 are in the pipeline.

The same is true with Bradleys—a goal of 6,800. We have acquired 3,200 and the appropriations require almost another 5,000 of those. These are very, very significant contributions to the modernization of the force.

We have acquisition authority now for 600 Apache helicopters. We have almost 300 in the inventory against a goal of 675. For the Black Hawks, we have over 800 against a goal of 1,107 and are funded to 931 in fiscal year 1989. Likewise, a similar type of support has benefitted the MLRS program.

READINESS IMPROVEMENTS

	1980	1987
ACTIVE DIV COMBAT READY	10	16
ACTIVE DIV NOT COMBAT READY	6	2 *

* 6 LID AND 10 LID - STILL BEING FORMED

SLIDE 12

COMBAT-READY DIVISIONS

Some years ago we were at 16 Active Component divisions, and of those 16 divisions only 10 were combat ready and 6 were not. Today your Army consists of 18 divisions, and of those 18, 16 are combat ready. The two that are not we are building—the 6th and 10th Divisions.

WHAT WE'VE DONE

FY80 TO FY87

POMCUS DOUBLE

179K INCREASE IN RC END STRENGTH

EQUIPMENT INVENTORY INCREASES

TANKS	5,260
BFVS	3,235
APC	5,386
HELICOPTERS	1,354
MLRS	333
HEMTT	6,963
HMMWV	21,825
CUCV	61,719

INCREASE IN COMBAT CAPABILITY 62%

CONVERSIONS

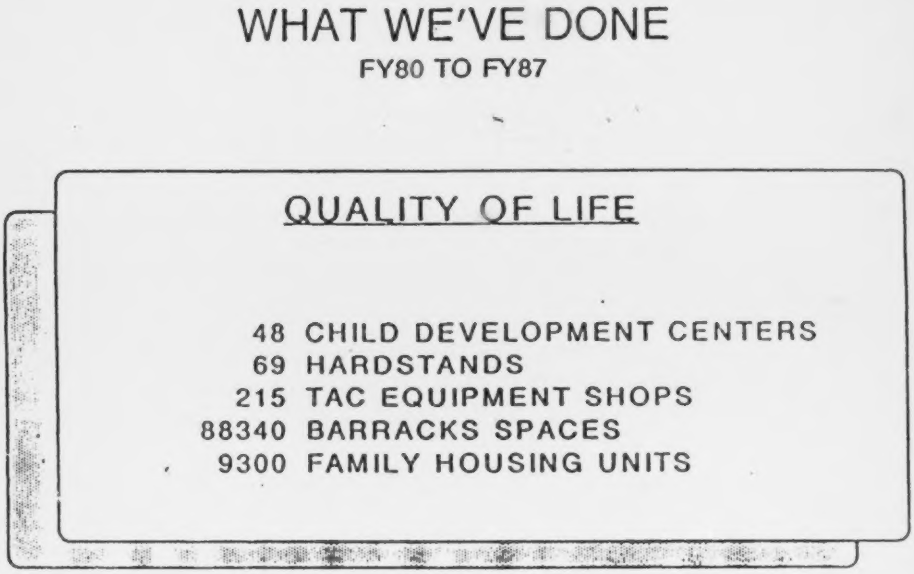
AH1G/AH1S	342
M60/M60A3	3,124

SLIDE 13

INCREASED CAPABILITIES

Now if you want to look at some numbers of what you have done, we would point out to you that with your funding you have increased the combat capabilities of the Army by 62 percent.

You acquired almost 22,000 HMMWV's and 62,000 CUCV's and have converted and upgraded over 3,100 M60 tanks to the M60A3. You also have provided 88,000 new living spaces in the Army barracks.



WHAT WE'VE DONE

FY80 TO FY87

QUALITY OF LIFE

48	CHILD DEVELOPMENT CENTERS
69	HARDSTANDS
215	TAC EQUIPMENT SHOPS
88340	BARRACKS SPACES
9300	FAMILY HOUSING UNITS

SLIDE 14

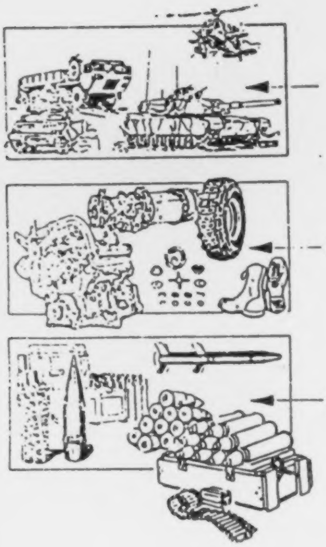
QUALITY OF LIFE

In Quality of Life, you have provided us with 48 child development centers, 69 new motor pool hardstands, and 9,300 family housing units.

WHAT WE'VE DONE

FY80 TO FY88

WAR RESERVES



3% INCREASE IN MAJOR ITEMS

21% INCREASE IN SECONDARY ITEMS

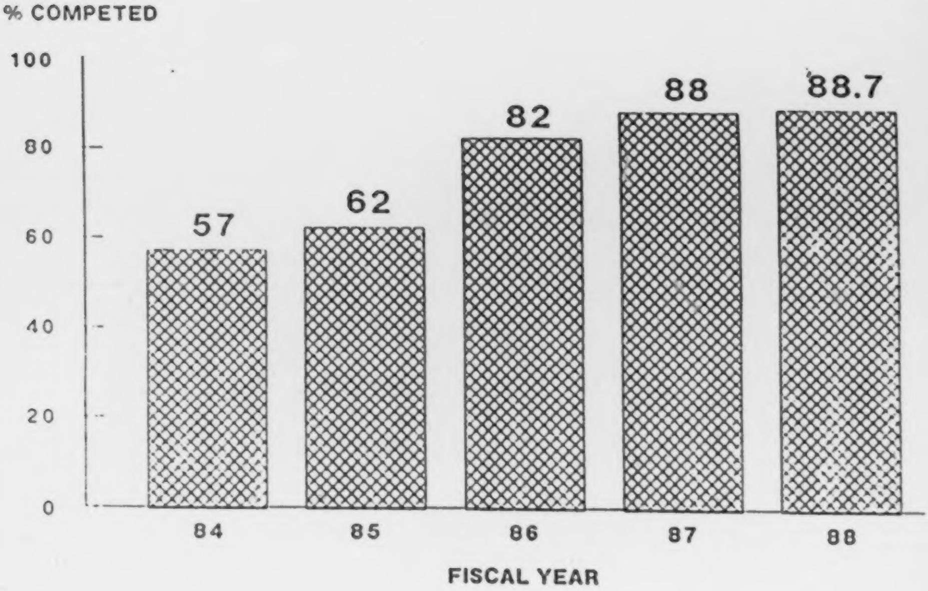
34% INCREASE IN MUNITIONS

SLIDE 15

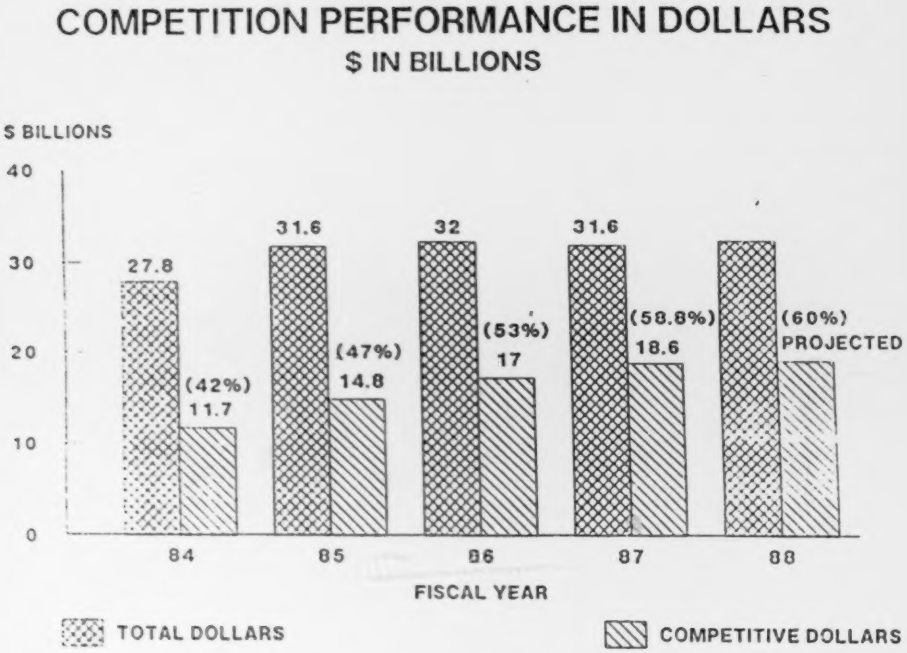
WAR RESERVES

I would point out to you that we increased our war reserves stocks by 3 percent in major items, 21 percent in secondary items, and by one-third in munitions accounts.

COMPETITIVE PROCUREMENT ACTIONS



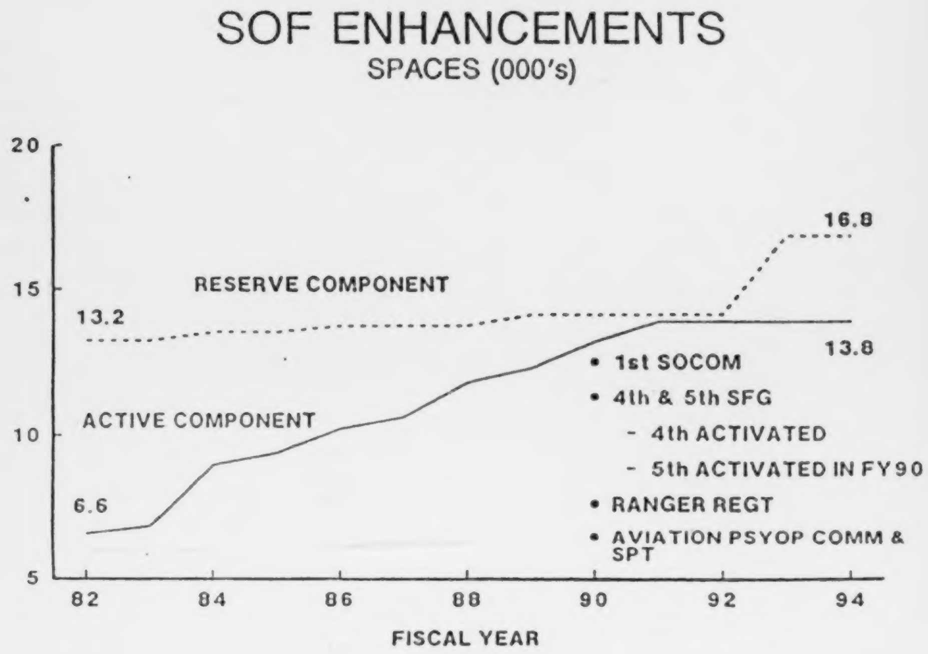
SLIDE 16



SLIDE 16A

COMPETITION

One of the things that we have done to save money—we are now competing more of our contracts. We now compete 88 percent of them which translates to about 60 percent of the dollars that are available to be spent.



SOF ENHANCEMENTS
SPACES (000's)

SLIDE 17

SPECIAL OPERATIONS FORCES

As an indication of the emphasis that we place on special operations forces, including the Special Forces, some of which are now located at Fort Campbell, you will see this particular ramp, with the active force increasing to 1990. It has doubled to 13,000. The dotted line is the ramp in increase of the Reserve Components in Special Forces to give us the capability to handle low-intensity conflicts.

With that, I will defer to General Vuono.

[The prepared statement of Secretary Marsh follows:]

PREPARED STATEMENT

HONORABLE JOHN O. MARSH, JR.
SECRETARY OF THE ARMY

BUDGET OVERVIEW

Mr. Chairman and Members of the Committee: It is a pleasure for me to appear before the Committee today to report on the condition of the United States Army in 1988, a year in which we will continue our observance of the Bicentennial.

This will be the year in which we remember and celebrate the ratification of the Constitution of the United States.

It is with great satisfaction that I am able to inform you today that the Army we have fielded, with the support of the people, of the Congress, and particularly this Committee, is ready to successfully perform the missions assigned to it by the National leadership.

The soldiers who comprise today's Army are the highest quality, by any measure, of any who have ever served. They are highly motivated, well equipped, well led, and well trained. They represent their country well, and through their dedication, determination, and professional competence create the conditions of deterrence which preserve our National security.

Since 1980, we have established a strong, positive momentum in building and maintaining the capabilities of all the Armed Forces. But even as we have moved forward in enhancing our ability to deter war, our potential adversaries have made significant improvements of their own.

Our objective in the immediate future is to maintain the momentum established over the past eight years. There are four key factors that will continue to determine the development and direction of the Army program. They are:

oo the Threat
oo the nature of the conflict
oo global missions for Army forces
oo available resources

Because of the fiscal realities that we all recognize, this will be no easy task. The amended budget we have submitted to you for FY 89 is not without risk. It is over $4 billion less than the FY 89 budget submitted last year in our initial two-year budget covering the years FY 88 and FY 89. It represents negative growth of 1.6% compared to the FY 88 Army budget approved by the Congress last December. Nonetheless, we believe it details an Army program that allows us to preserve many of the positive gains made in the preceding years in our efforts to provide for the security of the United States.

As you review this budget submission, I would ask you to do so in the context of the broader National security strategy, and the expanding capabilities of the threats we must inevitably face, rather than focusing on the programatics of each line. The Army program which we will describe for you today was designed to counter identifiable threats to the National security interests of the United States. Those threats are diverse, dynamic, and real.

The Threat

As we have discussed with you before, the greatest single threat to the security of the United States, and its Allies, is that posed by Soviet military power.

It must not be forgotten, that it is only in the arena of military might that the Soviet Union has any substantive claim to its ranking as a Superpower. By any other measure, it is not the equal of our country, or others comprising the community of Western democracies.

For this reason alone, we can anticipate that the Soviet Union will continue to maintain a large military establishment consuming a substantial portion of its resources and wealth. Today, the Soviets devote approximately 15-17% of their Gross National Product (GNP) to maintain their enormous military machine. This is two and a half times the percentage of GNP devoted by the United States to its National defense.

The recent initiatives of General Secretary Gorbachev, aimed at making Soviet society more open (Glasnost), and simultaneously restructuring its economy (Perestroika), are indeed welcome and hopeful developments.

The most visible evidence of the promise of these changes is the recent signing of the Intermediate Nuclear Forces (INF) Treaty, whose ratification the Senate is currently considering.

I add my voice to that of the professional military officers of the Joint Chiefs of Staff in urging ratification of this agreement which will eliminate an entire class of nuclear missiles.

This treaty will not only raise the nuclear threshold, but it clearly establishes other precedents which will be of great benefit to the United States and NATO.

Although the INF Treaty is a clear positive development, the conventional force imbalance which has existed in Europe for years will remain unaltered. Continuing to maintain the uneasy balance which creates deterrence will necessitate that conventional forces bear an increased share of the burden.

For this to be effective, the modernization program which we have established must be supported. We must address the need to modernize our tactical equipment, and our short range nuclear forces, particularly the Artillery Fired Atomic Projectiles (AFAPs), and the Follow-on To Lance (FOTL).

Adequate conventional forces will not be inexpensive. Nonetheless, it is essential that the investments required in the European Central Region be made.

The Soviets have yet to reduce the rate at which they are modernizing the equipment and force structure of their armed forces. Despite the potential promise of the INF Treaty, and the recently announced Soviet military doctrine of "reasonable sufficiency," we will continue to face a global Soviet challenge.

Soviet activity is not limited to Europe. The Soviets continue to be active in numerous areas around the world where their presence allows them to threaten other vital interests of the United States.

In this hemisphere, the Soviets continue to spend nearly $8 billion per year in maintaining the communist government of Cuba, an island which has become a valued Soviet arsenal in the Caribbean. Cuba provides the Soviets a strategic position astride important sea lines of communications through which 45% of all United States imports flow during peacetime, and through which 60% of supplies and reinforcements for NATO would flow in the event of war in Europe.

Furthermore, Cuba serves as a base through which Soviet supplies destined for the communist government in Nicaragua are funneled. To date, the Soviet Union has provided the Sandinista government military assistance valued at over $2.4 billion. With this assistance, the Sandinistas have built armed forces larger than those of all their neighbors combined. Although their own forces presently exceed that necessary for legitimate self-defense, we have recently learned that the leaders in Managua have plans to increase the size of these forces dramatically.

In the Pacific, the Soviets continue to probe for opportunities to establish new positions. They have continued to expand the size of their Pacific fleet, and enhance the port facilities at Cam Ranh Bay in Vietnam. From this important base, they are able to threaten the sea lanes running through the South China Sea, the Indian Ocean, and the important Straits of Malacca.

In numerous areas throughout the Third World, from Angola in Africa, to Peru in South America, the Soviets are active. They sponsor military assistance programs in 42 Third World countries, providing equipment and technical services which gives them valuable access and establishes a useful presence.

The threat to United States interests posed by the Soviet Union, its allies, and its surrogates, is great, growing, and shows few signs that it will soon be reduced in scale or intensity.

The Spectrum of Conflict

The challenges to our Nation's security run the length of the spectrum of conflict. This spectrum ranges from those threats, such as that posed by strategic nuclear wars, which are very risky and costly, but fortunately improbable; to those, such as terrorism, which are much less risky, less costly, and therefore, much more likely.

The Army must be prepared to successfully and appropriately act anywhere along this continuum.

Central Europe is the most heavily militarized area in the world; it is the sector which faces the largest and most concentrated Soviet threat; it is the theater which is most clearly within the shadow of Soviet power, and whose loss would most quickly and decisively alter the geo-strategic balance.

War in Europe is an example of a point on the spectrum of conflict where the probabilities are relatively low but the risks are high. That the likelihood of general war in Europe is low is a circumstance that exists not because of some natural order on the Continent, indeed even a cursory review of history reveals quite the opposite, but because the United States and its Allies have taken steps to make conflict in this pivotal theater unlikely. This is the essence of deterrence.

It is our clear responsibility, in the post INF period, to ensure that this condition remains.

Less risky, and therefore more probable, is low intensity conflict. War on this end of the spectrum demands Army forces very different in organization, equipment, and skill from those deployed as heavy formations in support of our NATO Allies. To respond to the threat in this dimension, Army forces will have to counter irregular or unconventional forces, enemy special operations forces, and terrorists.

Because the threat at this end of the spectrum is highly probable, the Army must always be prepared and ready to respond. We have, accordingly, taken numerous, and specific steps, to ensure that selected Army forces are trained in this type of warfare.

Army Missions

Through a continuous process of assessing the national security interests of the United States, evaluating the threat, and determining the ways and probabilities that our interests may be placed at risk, the national leadership determines our national security objectives and policies.

As has been stated before, the national security objectives of the United States are to deter conflict, coercion, and to defeat aggression; to assist Allies and friends to defend against armed aggression, insurgencies, and terrorism; to ensure access by the United States to critical resources, the oceans, and space; to reduce Soviet presence throughout the world; to prevent the transfer of militarily significant technology; to pursue equitable and verifiable arms reduction agreements; and to defend and advance the cause of democracy, freedom, and human rights throughout the world.

To achieve these objectives, we establish a national security strategy incorporating the economic, military, and other means of national power.

The fundamental components of our national military strategy remain nuclear deterrence supported by negotiated arms reductions and the Strategic Defense Initiative; strong alliances; forward deployed forces; a strong central reserve; force mobility; freedom of the seas, air, and space; and effective command, control, and intelligence.

From the national security objectives, and the components of national strategy, the Army derives its missions. These include: to defeat a Warsaw Pact attack on NATO while maintaining its territorial integrity and security; to defend vital United States interests in the Pacific; to deny the Soviets control of the Persian Gulf and associated oil resources; to assist Allies and friends in Asia, Latin America, Africa; to maintain the capability to counter threats in the Western Hemisphere; and to respond to other threats to American interests anywhere in the world.

Resources

Several years ago, the Army made a decision to adopt a policy which froze our end strength at 781,000 soldiers in the Active Component, so that we could provide the resources necessary to recruit a quality force, provide it with modernized equipment of increased capability, and train it to be ready to meet a wide variety of missions.

Within this self-imposed ceiling, we created new force structure which increased our capability to respond rapidly and effectively world-wide, develop necessary specialized units, and capture the promise of new technology.

Currently, Army force structure contains 18 divisions in the Active Component, and 10 in the Reserve Components. These units are assigned to five corps which contain additional combat support and combat service support units. Finally, we have added specialized units, such as the special forces groups and the Ranger regiment, capable of responding across the spectrum of conflict.

However, the budget for FY 89 will indicate plans to reduce the Army end strength by about 8,600 soldiers in the Active Component. To accomplish this, we will have to reduce the force structure including at least one Active Component brigade.

These reductions, along with the reductions in officer strength mandated by statute, are steps that we take with great concern and reservation. But preserving the progress that has been made in creating a more combat effective force within stringent budgetary constraints requires these actions.

I believe, nonetheless, Congress should reconsider the mandated officer reductions. Recent experiences have demonstrated that modern combat is a leader intensive endeavor. Our warfighting doctrine places a premium on initiative, imagination, and flexibility -- traditional leadership qualities. A relaxation of the mandated reductions would have many positive effects both operationally and administratively.

Program Highlights

There are several elements of the Army program I would like to highlight.

Special Operations Forces

As mentioned earlier, both in human and budgetary terms, the Army has made a major investment in Special Operations and Low Intensity Conflict (SO/LIC).

Within the Army, numerous steps have been taken since 1982 to revitalize the Army's capability to perform special operations. These include:

oo Creation of the 1st Special Operations Command, now the Army component of the United States Special Operations Command.

oo Activation of the 75th Ranger Regiment.

oo Activation of a third Ranger battalion.

oo Activation of a fourth Special Forces Group with a fifth scheduled for activation in 1990.

oo Activation of aviation, communications, and PSYOP units.

In addition, to provide for better management of its personnel, and add to the visibility and spirit of Special Operations soldiers, the Army established a Special Operations branch in 1987. This branch, with its own distinctive insignia now worn by nearly 5,000 soldiers, illustrates the Army's firm commitment to building and maintaining a combat ready Special Operations capability.

By the end of next fiscal year, the Army will have over 26 thousand soldiers, in the Active and Reserve Components, serving with Special Operations Forces units.

A major effort in Special Operations Forces has been in the area of Special Operations Aviation. This high demand mission requires not only highly trained, dedicated air crews, but also specialized aircraft. With Initiative 17, the Army and Air Force have attempted to move the rotary wing SOF mission to the Army.

The Army is developing two specialized aircraft for this mission, both variants of existing, proven models: the MH-47E for medium range missions, and the MH-60K for shorter ranges. I urge your continued support for both of these programs which will give us a greatly enhanced capability in this vital area.

As previously discussed, the Army sees a growing challenge in low intensity conflict. In addition to our Special Operations Forces, we have added light divisions to the force structure in response to the high probability of facing this threat.

Eventually, five of the Army's divisions will be in the light configuration. Presently, two are complete and certified, the 7th Division at Fort Ord and the 25th Division in Hawaii, while three are still forming.

These divisions, designed to fight in the low intensity environment yet retaining capability for high intensity conflict as well, and possessing a high degree of strategic mobility, clearly demonstrate the Army's commitment to addressing threats in this arena.

The 10th Division at Fort Drum, New York, is forming paced to the facility construction of the post. Beginning in FY 86, the Army began a major effort to expand the facilities at Fort Drum, a location which contained ideal cold weather training areas for a light division. The Amended FY 89 Request contains $214 million to continue this major effort which is progressing very well and supporting the activation schedule of the Division.

The Army effort with Fort Drum and the 10th Division demonstrates the commitment to designing, fielding, housing and training forces necessary to meet the challenges of low intensity conflict.

Personnel

Recruiting trends in the Army remain encouraging despite the expected difficulties of recruiting among a decreasing population.

For the year just completed, once again over 90% of new Army recruits were high school graduates. This percentage of high school graduates has been achieved every year since FY 83 and will remain the Army goal for FY 88.

Our goal will remain in recruiting less than 10% of new soldiers from those scoring in Category IV (CAT IV) on the Armed

Forces Qualification Test. For FY 87 less than 4% of our new soldiers were in this category, the third straight year this index has been under 10%.

Along with other services, the Army has been screening its personnel for the HIV virus. This screening has been completed in the Active Component, and will be ongoing in the Reserve Components until August. The rate of HIV positives among Active soldiers, about 1.41 per 1000 tested, appears to be somewhat lower than that in the general population.

We are about to initiate a program which will periodically test all soldiers at least every two years. In conformance to existing DOD policy, those found positive are prohibited from appointment or enlistment in the Armed Forces.

Those on active duty who test positive receive extensive evaluation, psychological support, and treatment if necessary. They are retained on active duty until they become medically unfit for retention. In addition, those determined to have serologic evidence of the infection are ineligible for overseas deployment and assignment to certain units and organizations.

The Army and the Department of Defense will continue to carefully address the serious issues raised by the presence of this deadly infection. We will use thorough education programs in attempting to control its spread. When it is detected, we will do everything possible to meet the needs of the individual, and where necessary, address the concerns of local health officials.

Guard and Reserve

The Army continues its efforts to enhance the quality, equipment, and training of the Reserve Components. The Reserve Components will continue to play a major role in the Army's wartime missions.

We have reached the point where we have one soldier in Reserve Component units for every soldier in the Active force. In the years just ahead, we will have more soldiers in the Reserves than in the Active Component. Given the importance of the Reserve force in rounding out and augmenting the regular Army, and in fielding significant warfighting formations, it is imperative that we continue to give support to Reserve Component programs.

Last fiscal year, nearly 13% of the Army budget was dedicated to the Army National Guard and Army Reserve. These funds contribute to modernization efforts, fund mobilization and readiness exercises, and support recruiting efforts.

Training of Reserve Component units continues to improve each year. In particular, we have taken advantage of training opportunities outside of the United States which have given soldiers a chance to both hone their military skills and serve as ambassadors of good will.

Last year, nearly 55,000 Reservists, from nearly 2,500 units of various size, trained in numerous countries including: Egypt, Germany, Iceland, Ecuador, Japan, Korea, and the Philippines. We plan to continue, and slightly expand this program in the coming year.

Acquisition

We have nearly completed our implementation of those changes in the acquisition program mandated by the President's Blue Ribbon Commission on Defense Management (the Packard Commission), and the Goldwater-Nichols Bill.

Reporting to the Acquisition Executive are 22 Program Executive Officers, and 3 independent Project Managers. The implementation of this organizational structure has streamlined acquisition management and will contribute to more effective and efficient development and fielding of major modernization programs.

Competition of contracts continues to be a major Army success story. Since the implementation of the Competition in Contracting Act of 1984, the Army has made steady and continuous progress in increasing competitive awards as a percentage of contracts awarded.

In 1984, the Army only competed 42% of the dollar value of its contracts. Last year, that figure was nearly 59%.

Competition works. It encourages innovation and discourages the abuses widely reported by the media. It provides a tool with which to capture the major merits of a market economy. Experience has shown that competition may bring savings of 20-30% on previously sole-source acquisitions -- a significant saving.

We realize that competition may not be the most beneficial strategy in every case. It is an acquisition approach that we will use when it buys the Army the best value. Under no circumstances will we accept a lesser quality in either supplies or services just to have competition. Competition is a means, but not an end in itself.

Although there are numerous programs that one could cite as examples of progress in developing and fielding modernized equipment, I would like to specifically mention two in the communications arena.

The Army is now in the progress of fielding the SINCGARS radio, a new tactical communications system which will provide commanders an effective, reliable, and easily maintainable radio enhancing battlefield command and control.

Recent evaluations have demonstrated that SINCGARS exceeds the established standard for reliability of 1,250 hours mean time between failures (MTBF).

Currently fielded in Korea, where it has performed exceptionally well with units along the demilitarized zone, this system will begin fielding in the Training and Doctrine Command this August.

A second source selection for SINCGARS is scheduled for May 1988. This award will include a firm, fixed price contract with a reliability incentive. Full competition will begin in FY 91.

The fielding of SINCGARS will allow the Army to replace the aging and vulnerable VRC-12 family of radios which have served as the backbone of our tactical communications system for nearly 20 years.

The Army is currently fielding at Fort Hood, Texas, the first division set of the Mobile Subscriber Equipment (MSE), an integrated, switched communications system for Corps and Division forces.

MSE is a $4.6 billion Nondevelopmental Item (NDI) which relies on existing hardware and software components to satisfy operational and functional telecommunications requirements. The acquisition of MSE will give the Army the command and control aspects necessary to fully implement our AirLand Battle doctrine.

MSE fielding will essentially be by Corps including their assigned Reserve units. For the first time, the Army will have both Components equipped with a communications system that is interoperable, mobile and secure.

Intelligence

Over the past few years, Army intelligence has made significant progress in organizational structure and doctrine. On the battlefield, combat electronic warfare and intelligence (CEWI) units have been formed to provide maneuver commanders organic, integrated, and responsive intelligence support.

At the national level, the Army continues to play a key role in both intelligence and counter-intelligence. In the human intelligence (HUMINT) arena, Army personnel represent over 50% of all Department of Defense HUMINT assets.

In acquisition, the Threat Integration Staff Officer (TISO) system provides Program Executive Officers and Project Managers continuous threat support for each system throughout its developmental life cycle.

These diverse efforts are coordinated and detailed in the Army Intelligence Master Plan (AIMP) which establishes a single, coherent strategy for the evolution of Army intelligence functions and force structure through the year 2004. It covers all systems including collection, processing, and communications.

This master plan has become the model for other Army functional area development efforts, and is used and studied by other services and agencies.

Army intelligence continues to lead the way in providing high quality and timely intelligence support to our soldiers in the field, and to other national agencies as directed.

Reorganization

Finally, the Army is nearing completion on the reorganization effort undertaken last year in conformity to the Reorganization Act of 1986.

The Army has completed its work on Titles I, III, and V with the exception of the manpower realignments that are progressing and will be completed by 30 September 1988.

The implementation of Title IV, where we continue to have reservations over the management of joint officer assignments, is ongoing.

Army work on Titles II and VI is continuing on schedule.

As I testified last June before the House Armed Services Committee, we approached the reorganization as an opportunity to improve operations. We thoroughly analyzed all functions to identify duplications, supervisory layering, and the existence of organizations which might be transferred to other agencies.

We realigned certain functions within the Army Secretariat and the Army Staff moving several activities to the Secretariat where they became responsible to the Secretary, but responsive to the Chief of Staff.

The new organization is working well and residual actions, primarily personnel realignments, are on schedule.

Conclusion

The FY 89 Budget that we have submitted is designed to maintain the positive momentum we have generated over the past seven years. It will provide funds to protect readiness and training levels, as well as continue with our most important modernization programs and sustainability enhancements.

It does, however, reduce Army personnel and force structure. This was a cost we accepted reluctantly in the face of significant budget constraints. Again, in real terms, the Army's budget for FY 89 is 1.6% less than that of the previous year.

As I have said before, less money buys less defense and less deterrence. This budget and the program it supports are not risk free, but with certain exceptions, we believe it is adequate in providing for our most immediate needs.

CHIEF OF STAFF, U.S. ARMY

STATEMENT OF GEN. CARL E. VUONO, CHIEF OF STAFF, U.S. ARMY

ACCOMPANIED BY:

LT. GEN. PIHL, MILITARY DEPUTY TO THE ASSISTANT SECRETARY OF THE ARMY FOR RESEARCH, DEVELOPMENT, AND ACQUISITION

MAJ. GEN. JAMES F. McCALL, DIRECTOR, ARMY BUDGET, U.S. ARMY

ARMY READINESS

General VUONO. Thank you, Mr. Chairman. I request that my formal statement be placed in the record, and I will just have a few words to add to Secretary Marsh's overview.

First of all, I want the committee to know that you have a ready Army today and I believe we demonstrated that last week during the emergency deployment readiness exercise that we conducted from multiple locations—Fort Bragg, NC, and Fort Ord, CA.

Also, I am well aware that the committee knows that this was not an easy budget to put together. It is easier when there is an increment rather than a decrement. So we went back to the basics, focused our budget on what we must do to provide the land forces needed by the United States. It is based on our national security objectives and the threat that the United States faces, with which the committee is very familiar.

However, I feel this is very important at this particular time, because we are entering an era in which the burden of deterrence is shifting more to the conventional side as a consequence of the INF Treaty and other matters. To meet the threats to our interest, the Army has to field a carefully tailored mix of forces, one postured for the best deterrent effect and one that takes advantage of our Reserve Components' capability.

With your help, we have built a good deal of positive momentum the past several years. I believe we must continue to maintain that high level of readiness and shape the Army to meet the demanding requirements of the future.

REQUIREMENTS

The characteristics we require in a tailored mix of heavy, light, and special operations forces for both the Active and Reserve Components include the following. First of all, high-quality, retainable soldiers, and that is why we feel very strongly, as the Secretary mentioned, about the 4.3-percent pay raise for our soldiers. I think it is absolutely essential.

We want progressive and sequential leadership development for the officers and NCO's who lead the Army. We believe superb, realistic, and dynamic training is the cornerstone to combat readiness. We have a doctrine which guides the leader development, organization, training, and modernization of the force. We believe high-quality materiel systems are necessary for close, deep, and rear operations, and, finally, a research and development establishment that can ensure the Army a qualitative edge over potential enemies in the future.

So as we put together the 1989 budget the Army sought to do a number of things. We tried to maintain essential force readiness and sustainment. We had to slow the pace of modernization and minimize the negative impacts on our force structure. The deterrent and warfighting value added was and will continue to be the measure of merit for this and future budgets.

BUDGET DECREMENTS

As you stated in your remarks, overall the Army's fiscal year 1989 budget represented approximately 1.6 percent negative real growth in the TOA, the fourth consecutive year that the Army budget has declined in real terms. So to meet our decrement target we had to cut deeply.

We did not get the growth we wanted in sustainment and we had to cut MILCON significantly. Our RDA accounts are down, but we were able to protect systems with the greatest value added for war fighting. We protected training funds, but depot maintenance took a reduction.

We had to reduce the active end strength by 8,600 soldiers, to cut about 12,200 civilians, and to eliminate planned growth in our Reserve Components of 26,000 soldiers. These cuts were necessary to accommodate the large decrement, but it was based on fiscal, not military, requirements, and they were far from easy or risk free.

These cuts will add to the risk associated with our national security objectives. They will somewhat lower the readiness of selected Active units and will stop the needed growth in the Reserve Component force structure. The civilian cuts may cause diversion of soldiers to perform tasks that we normally give the civilian work force, something we have tried very hard over the years to prevent.

So a significant level of risk unavoidably has been made somewhat worse with this budget. In the future, I believe we must guard particularly against reducing an already small Army to levels where we cannot compensate for reductions and where even our best quality Army will be unable to satisfy the Nation's needs.

MODERNIZATION

We will also have to increase our attention to modernization, but to do that we need to understand modernization for what it is. It is not an event or merely the introduction of the latest equipment; it is a continuous process where resources, soldiers, materiel, and doctrine are fused through intensive training to produce the greatest warfighting capability.

So it is important to keep in mind that our ongoing equipment modernization efforts are long overdue. We are not yet keeping pace with the Soviet developments. They have long outproduced us quantitatively, and now have drawn abreast of us in the quality of their ground force equipment.

So in light of the INF Treaty, with the burden of deterrence continuing to shift to the conventional forces, as I said earlier we are in no position to reduce further the pace of modernization. Sound modernization programs are also a prerequisite for any meaningful progress toward an equitable and verifiable conventional arms control agreement with the East.

TRAINING

Training has been and will continue to be well supported in the Army's budget. It is the basis for both readiness and modernization, and our highest priority effort with the Army in the field.

FOREIGN CURRENCY FLUCTUATIONS

Now we have one difficult area that cuts across many of our programs and of which you are well aware and we need your help. That is in the foreign currency fluctuation problem. We simply need more flexibility to shift our funds among appropriations covering prior and current years. In my view, this makes sound management sense and will keep us from diverting mission funds to meet our foreign currency bills, as we are being forced to do.

So, in closing, Mr. Chairman, our budget will continue to build an Army that addresses the U.S. need for ready, sustainable land forces. It is a sound budget, although one which forces us to cut force structure to meet our fiscal constraints. Since our strategy remains the same and the threat has increased, the decrement we must absorb in 1989 will cause the risk associated with our strategy to increase. Over the program years we hope we can work together, as we have in the past with this committee, to establish a stable level of real growth in our defense programs.

We need your support this year and in the future if we are to meet the requirements of our national security strategy. Thank you, Mr. Chairman.

[The prepared statement of General Vuono follows:]

PREPARED STATEMENT

GENERAL CARL E. VUONO
CHIEF OF STAFF, UNITED STATES ARMY

BUDGET OVERVIEW

Mr. Chairman and Members of the Committee: It is a privilege for me to appear before your Committee to report on the state of the United States Army and discuss its budget for Fiscal Year 1989.

NATIONAL STRATEGIC PERSPECTIVE

Our national defense efforts must be guided by vision. The vision that guides Secretary Marsh and me is based on the Constitution and our Nation's interests, allows us to establish the important objectives for the Total Army for the present and the future, and provides the framework for budget and program formulation.

Accordingly, our national security objectives are among the most important principles upon which we based the Army's vision. In brief, our major national security objectives are:

o To safeguard the United States, its Allies, and interests by deterring aggression and coercion; and should deterrence fail, by defeating the aggression on favorable terms, at the lowest possible level of hostilities.

o To encourage and assist our allies and friends in defending themselves.

o To ensure U.S. access to critical resources, markets, the oceans, and space.

o To reduce, where possible, Soviet military presence throughout the world; to increase the costs of subversion to Moscow; and to encourage positive change within the Soviet Bloc.

o To prevent transfer of militarily critical technology and knowledge to potential adversaries.

o To pursue equitable and verifiable arms reduction agreements, with special emphasis on compliance.

o To defend and advance the cause of democracy, freedom, and human rights throughout the world.

These objectives create a demanding set of strategic requirements which we address in our comprehensive, worldwide, Alliance-based national security strategy. As one of the tools of that strategy, U.S. military power is charged with dealing with a variety of threats which make deterrence and defense a complicated challenge, especially in view of the fiscal constraints and competing spending priorities that our government faces.

THE THREAT

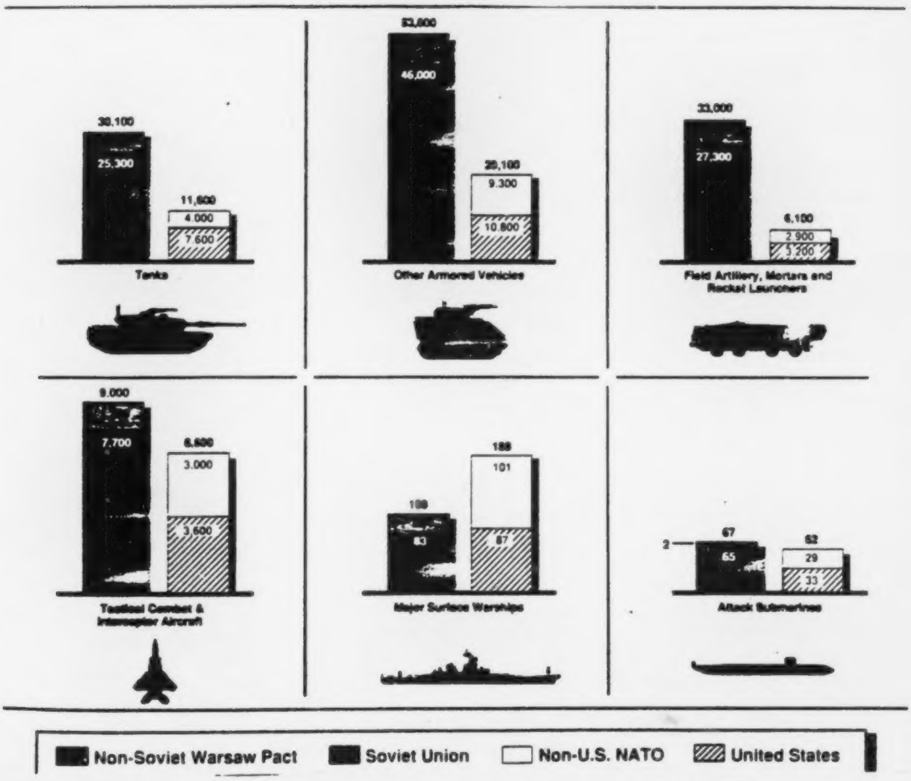
The threat to America's national security interests is multifaceted, complex, and directed against our interests throughout the world. To put the FY 1989 Budget in context, I want to highlight key elements of the threat:

o The USSR has been, is, and for the foreseeable future will remain the principal threat to our security. Despite General Secretary Gorbachev's focus on economic restructuring and his call for a new openness in Soviet society, the military threat from the Soviet Union continues to increase at an alarming pace, taking up 15-17% of its GNP, more than 2-1/2 times the percentage we spend.

o The Soviet attainment of parity with the United States in strategic nuclear weapons in the early 1970s began a shift in the burden of deterrence to other forces, especially conventional forces. This trend is reinforced by the current INF Treaty -- whose ratification by virtue of its own merits I support along with the other members of the Joint Chiefs of Staff -- and by increased attention to conventional land operations reflected in Soviet military doctrine.

o Nowhere is the growth in Soviet military power as clear as it is in Europe, both the United States' and the Soviet Union's first out-of-homeland defense priority. As both General Galvin, the Supreme Allied Commander, Europe, and I have recently testified, the imbalance in conventional forces capabilities in Europe in favor of the Warsaw Pact has been increasing due to the unprecedented modernization of Soviet forces. And while the United States and its NATO Allies have made significant improvements, our adversary has worked harder and is now matching or exceeding us in the quality of his new ground forces equipment. Production trends, shown in the graphic below, suggest that these trends will continue.

Production of Selected Weapons for NATO and the Warsaw Pact Forces (1978-1987)



[Source: Secretary of Defense's Report to Congress on the Amended FY 1988/1989 Biennial Budget, February 18, 1988.]

Clearly, the United States and its Allies must pay greater attention to the readiness and modernization of NATO-oriented conventional forces. The readiness of our forward-deployed and U.S.-based reinforcing units, and the programs to field modern weapon systems including deep operations systems, such as the Army Tactical Missile System, are all top Army and NATO priorities. The modernization of U.S. and NATO Short-Range Nuclear Forces, particularly the development and fielding of a Follow-On To Lance, is equally important in maintaining the credibility and vitality of NATO's strategy of flexible response.

o The growth of the Soviet threat in other regions, such as the Far East and Southwest Asia is significant, as are the Soviet-supported and non-Soviet threats in the Third World. The challenges in these areas range from low-intensity conflict which encompasses terrorism, insurgency and counterinsurgency; to mid-intensity conventional conflict. There are more than 20 on-going conflicts in the Third World and more than half directly affect U.S. friends and allies. Moreover, a number of Third World countries, generally hostile to U.S. interests, have become sophisticated military powers in their own right. Among these are Cuba, Vietnam, North Korea, Syria, Iran, and Libya. Nicaragua also aspires to membership in that group.

In sum, the comprehensive nature of the U.S national security strategy and the complex, widespread threats to our vital interests, compel the U.S. Armed Forces in general, and the Army in particular, to prepare for conflict across a broad spectrum from the currently on-going low-intensity conflicts in the Third World, to the less probable but more intense and costly higher-intensity conflicts that we seek to deter in Europe, Northeast Asia, and Southwest Asia.

ARMY VISION

To be prepared for such eventualities and fulfill its missions according to our national security strategy, the Army must build a carefully tailored mix of force capabilities with the resources available. The Army must design and field an optimal combination of forces, (heavy, light, and special operations), properly postured for the best deterrent effect (forward-deployed and U.S.-based), and taking the best advantage of our considerable Reserve capacity (Army Reserve and Army National Guard). In creating this total force, we must take into account the current needs of the Unified and Specified Commanders-in-Chief who are charged with commanding the deterrent forces of our Nation, and the Army's obligations to invest now to properly shape the Army the United States will need for the future.

The force that the Army builds to counter the threat to our interests must be able to fight and win in joint and combined operations across the spectrum of conflict, throughout the world. Not so that we become the world's policemen, but so that our potential enemies will know we have the capability and the national will to defeat challenges to our vital interests. The characteristics that the Army must have to field a ready force today and properly shape the future include:

o High quality, retainable soldiers;

o Superb, realistic training and progressive leader development;

o A modern doctrine which guides the leader development, organization, training, and modernization of the Force;

o High quality materiel systems for close, deep, and rear operations that meet the requirements of the Unified and Specified Commanders-in-Chief and emphasize placing U.S. strengths against exploitable threat vulnerabilities; and

o A research and development establishment that can extract maximum benefit from modern technologies to assure the Army's qualitative edge over potential enemies in the future.

BUDGET OVERVIEW

In meeting the FY 1989 budget decrement, the Army was guided by its vision of the force that the Nation needs to meet its strategic requirements. In reaching our decrement target, we sought to maintain essential force readiness and sustainability, slow the pace of modernization, and minimize force structure impact. We were not able to meet all our requirements to the degree we believe that our strategy requires. Indeed, the budget before you represents a severe reduction below what the Army had planned for 1989.

The Army's FY 1989 budget requests Total Obligation Authority of $78.0 billion. Outlays are projected to be $76.7 billion. This request in constant FY 1989 dollars represents a $1.3 billion decrease when compared to FY 1988, or approximately 1.6 percent negative real growth in Total Obligational Authority, making 1989 the fourth consecutive year that the Army budget has declined in real terms.

Operations and Maintenance accounts contain $26.0 billion in FY 1989. Funding for this category has grown from 30 percent of the budget in FY 1986 to 33 percent in FY 1989 because of increasing support costs associated with past modernization, and reductions in current investment funding.

The Military Personnel category contains $30.0 billion in FY 1989. The personnel accounts have increased from 36 percent in FY 1986 to 38 percent in FY 1989.

The investment accounts contain $22.0 billion in FY 1989. This represents 28 percent of the budget, a decline from 33 percent in FY 1986.

The budget contains a 4.3 percent military pay raise and a 2.0 percent civilian pay raise. However, our Active forces' end strength will be 8,600 soldiers lower than the original FY 1989 request. One brigade will be inactivated and two light infantry battalions will not be activated as planned. In addition, a number of field Army and sustaining base organizations will be eliminated or reduced. The Reserve Components' paid drill strength and Active Guard and Reserve positions have been capped at the FY 1988 levels.

In view of the importance of readiness to our deterrent posture, we provided resources for training for FY 1989 that will support the highest readiness category, which is a significant improvement over what we were able to fund for FY 1988. We also continued the momentum of our combat training center operations because these yield the highest training returns for the Total Army. Depot Maintenance of secondary items, such as tank engines, will be continued at the 100 percent level. Unfortunately, the Army was able to fund only 68 percent of the required depot maintenance for major end items of equipment. Also, funds for the companion central supply and transportation program are tightly constrained.

Research, development, and acquisition accounts were decremented. Nevertheless, the Army protected programs that best contribute to the warfighting requirements of the Unified and Specified Commanders-in-Chief, research crucial for the Army's future, and high-payoff new starts.

The pace of improvements in sustainment had to be reduced to meet the decrement target, resulting in less ammunition and war reserve stocks than the Army had planned to fund in FY 1989. This places the CINCs' ability to accomplish their wartime missions at greater risk. Similarly, military construction was cut to eliminate all but the projects most essential to force readiness. The backlog of maintenance and repair had to rise above a level the Army considers acceptable.

BUDGET ISSUES

Secretary Marsh's statement sets out the challenges this budget presents and which the Army believes worthy of your attention as you consider our request. I would like to highlight four issues which will have a great impact on the Army in the budget year and beyond: force structure and personnel, officer strength reductions, conventional forces modernization, and training.

Force Structure and Personnel

In submitting this budget the Army had to accept a force structure cut of one brigade, the deferral of the activation of two combat battalions, the cessation of Reserve Component growth, and a substantial reduction in civilian strength. The Active forces will decline to the lowest strength level in the past decade. In all, the Army will have 8,600 fewer soldiers and approximately 12,200 fewer civilians on its active rolls, and will have cancelled the increase of over 26,000 soldiers in the Reserve Components.

While the Army understands these cuts were necessary to accommodate an unusually large decrement based on fiscal, not military requirements, they were far from easy or "cost free". These cuts will add to the risk associated with our national security strategy, they will lower the readiness of selected Active units, they will obstruct needed changes in the Reserve force structure, and lead to the diversion of soldiers to perform functions normally assigned to the civilian work force.

In the future, we must guard against reducing an already small Army to levels where reductions in size cannot be overcome by mobilization and even our best quality is unable to satisfy the Nation's needs for ground combat power. The U.S. Army, before the 1989 decrement, did not have the structure in being to meet the JCS-recognized warfighting requirements. Thus, a significant level of risk has -- unavoidably -- been made marginally worse with this budget.

We must take care to maintain a force that is large enough and sufficiently capable to deter or defeat threats to our interests. Weapons and equipment are not the heart of the Army's warfighting capacity: quality soldiers in well-trained units are. We cannot buy real readiness even by superbly equipping an insufficient or inadequately postured force. We must not forget that, to afford modernization, we have in the past decade kept the Active force small. To make it smaller still in the 1990-94 period, without a commensurate reduction in the threat, is not advisable.

Officer Strength Reductions

Primarily as a result of the disciplined redesign of the Army's forces to enhance our ability to execute AirLand Battle doctrine and provide the needed combat service support, the Army increased its officer strength in recent years. We made these adjustments deliberately, over time, within the allotted personnel resources, and with the knowledge and support of the Secretary of Defense and the Congress.

Beginning in 1986, the Army was directed to absorb officer strength reductions. These reductions, determined by methods unrelated to the warfighting needs of the Commanders-in-Chief and without due regard to the negative consequences that would result, will contribute to lower Army readiness, cause additional personnel turbulence, and result in unavoidable damage to morale.

As would be the case with further force structure reductions beyond FY 1989, the execution of the impending officer reductions in FY 1989 and FY 1990 is inadvisable from the standpoint of the impact on overall force readiness -- adversely affecting the Army's ability to support the Unified and Specified Commanders-in-Chief, and transition to war upon mobilization. I urge further reconsideration of this issue by the Congress. The officers that we will have to remove from the Army are required and perform a significant role in modernizing and sustaining the readiness of our conventional forces.

Conventional Forces Modernization

Modernization is not an event or merely the introduction of the latest equipment. Rather, it is a continuous process wherein resources, soldiers, materiel, and doctrine are fused through intensive training to produce the increases in warfighting capabilities demanded by the threat and the Army's deterrent responsibilities.

On the equipment side, the FY 1989 budget has maintained the minimum, necessary level of modernization. Crucial warfighting systems -- such as the Abrams tank and the Bradley Fighting Vehicle -- will have sound production runs, and changes to our long-term aviation program will produce more combat power in the short-term and great economies and increases in effectiveness in the long-term. Together with the Air Force, we are on the verge of making significant advances in our capability to execute deep operations with the Army-TACMS and Joint-STARS, and the corresponding suite of C3I improvements. Taken together, our capabilities for close, rear, and deep operations will attack not only threat forces, but more importantly, the enemy's ability to execute his operational doctrine and achieve his strategic aims.

It is important to keep in mind that our on-going modernization efforts are long overdue. We are not yet keeping pace with Soviet developments. In the light of the INF Treaty, with the burden of deterrence continuing to shift to the conventional forces, we are in no position to reduce further the pace of modernization. Sound modernization programs within the North Atlantic Alliance will also be a prerequisite for any meaningful progress toward an equitable and verifiable conventional arms reduction agreement with the East. The history of our negotiations bears clear evidence that our adversaries will pocket any unilateral concessions the West is willing to make and will not reciprocate but rather will seek to place us at greater disadvantage and risk.

In a similar vein, the INF Treaty reminds us of the long-standing need to complete the modernization of our nonstrategic nuclear forces, particularly the Follow-on to Lance and the proper sizing of our Artillery-Fired Atomic Projectile stockpile in accordance with recognized NATO needs.

Training

I want to close with a few words on the subject of training which the Army believes is the cornerstone of combat readiness, and, therefore, the basis of deterrence.

Training is the Army's highest priority effort. It is the crucible in which readiness is produced. In view of our present challenges and the importance of using our constrained resources to the fullest possible extent, the Army has designated 1988 the "Year of Training" for the Total Army.

We know good training motivates soldiers and links soldiers to equipment, individuals to units, and units to their deterrent and wartime missions. Tough realistic training to high standards is the heart of the Army's ability to execute its missions now and in the future.

Despite the harsh effects of the budget decrement, the Army will not back off from its devotion to rough realistic training and progressive leader development. The Army will continue to use the combat training centers to the maximum extent possible to make our units and leaders more effective on the battlefield. These centers, which in the few years of their existence have already significantly improved the combat effectiveness of the Total Army, will enjoy the same high priority in the future. The Army's emphasis on leader development, including the improvement of the joint dimensions of professional education will continue to grow because leader development is the principal tool we have in shaping the future Army our Nation needs.

CONCLUDING STATEMENT

Mr. Chairman, the budget before your Subcommittee will continue to build an Army that addresses the United States' need for ready, sustainable land combat forces. The budget is a sound one, although one in which we have been forced to cut deeply to meet our fiscal constraints, and one in which the risk associated with our strategy increases. The Army needs your support, this year and in the future, if we are to meet the requirements of our national security strategy.

As you deliberate on and debate this year's and subsequent budgets, I ask you to keep in mind that the threats to our vital interests are in the main not mitigated by our fiscal dilemmas. The threat does not necessarily respond to our budget deficits. While other spending priorities are pressing, the failure of deterrence would be immeasurably more expensive than the continuation of a robust, well-supported, defense program.

RESUME OF SERVICE CAREER
of
CARL EDWARD VUONO, General

DATE AND PLACE OF BIRTH 18 October 1934, Monongahela, Pennsylvania

YEARS OF ACTIVE COMMISSIONED SERVICE Over 30

PRESENT ASSIGNMENT Chief of Staff, United States Army, Washington, DC 20310-0200, since June 1987

MILITARY SCHOOLS ATTENDED

The Artillery School, Basic and Advanced Courses
United States Marine Corps Command and Staff College
United States Army War College

EDUCATIONAL DEGREES

United States Military Academy - BS Degree - Military Science
Shippenburg State College - MS Degree - Public Administration

MAJOR DUTY ASSIGNMENTS

FROM	TO	ASSIGNMENT
Aug 58	Nov 59	Assistant Executive Officer/Platoon Leader, Howitzer Company, 1st Reconnaissance Battalion, 3rd Armored Cavalry Regiment, Fort Meade, Maryland
Dec 59	Jun 60	Commander, Howitzer Battery, 3rd Reconnaissance Squadron, 3rd Armored Cavalry Regiment, Fort Meade, Maryland
Aug 60	Oct 60	Assistant S-3, 5th Howitzer Battalion (105/155mm(SP)), 82nd Artillery Regiment, 1st Cavalry Division Artillery, 1st Cavalry Division, Korea
Oct 60	Aug 61	S-3, 5th Howitzer Battalion (105/155mm(SP)), Artillery, 1st Cavalry Division, Korea
Oct 61	Jul 62	Student, Artillery Officer Career Course, United States Army Air Defense School, Fort Bliss, Texas, and United States Army Artillery School, Fort Sill, Oklahoma
Jul 62	Sep 63	Assistant S-3, XVIII Airborne Corps Artillery, XVIII Airborne Corps, Fort Bragg, North Carolina
Sep 63	Dec 63	Commander, Headquarters Battery, XVIII Airborne Corps Artillery, XVIII Airborne Corps, Fort Bragg, North Carolina
Dec 63	Feb 65	United States/United Kingdom Exchange Officer for duty with the British 7th Royal Horse Artillery (Parachute), 16th Parachute Group, Aldershot, Hampshire, England
Feb 65	Jun 66	Team Chief, Fire Support Coordination Element, VII Corps Artillery, VII Corps, United States Army Europe
Jun 66	May 67	Executive Officer, 1st Battalion, 7th Artillery Regiment, 1st Infantry Division, United States Army Pacific (Vietnam)
May 67	May 68	Student, Marine Corps Command and Staff College, Quantico, Virginia
Jun 68	Jun 70	Personnel Management Officer, Assignment Section, Field Artillery Branch, Officer Personnel Directorate, Office of Personnel Operations, Washington, D.C.
Jun 70	Dec 70	Executive Officer, 1st Cavalry Division Artillery (Airmobile), 1st Cavalry Division (Airmobile), United States Army, Vietnam
Dec 70	Jul 71	Commander, 1st Battalion, 77th Artillery Regiment (later 21st Artillery Regiment), 1st Cavalry Division (Airmobile), United States Army, Vietnam
Jul 71	Mar 72	Operations Research/Systems Analyst, Office of the Vice Chief of Staff, United States Army, Washington, D.C.

Mar 72	Jun 72	Executive Officer for the Office of the Project Manager for Reorganization of the Army (QPRM), Office of the Chief of Staff, United States Army, Washington, D.C.
Jun 72	Jun 73	Student, United States Army War College, Carlisle Barracks, Pennsylvania
Jun 73	Jan 75	Chief, Budget Division, Plans, Programming, and Budget Directorate, Office of the Deputy Chief of Staff for Personnel, United States Army, Washington, D.C.
Jan 75	Aug 76	Commander, Division Artillery, 82d Airborne Division, Fort Bragg, North Carolina
Sep 76	Aug 77	Executive to the Chief of Staff, United States Army, Washington, D.C.
Aug 77	Aug 79	Assistant Division Commander, 1st Infantry Division (Mechanized), Fort Riley, Kansas
Aug 79	Jun 81	Deputy Chief of Staff for Combat Development, United States Army Training and Doctrine Command, Fort Monroe, Virginia
Jun 81	Jun 83	Commanding General, 8th Infantry Division (Mechanized), United States Army Europe
Jun 83	Jun 85	Deputy Commanding General, United States Army Training and Doctrine Command/Commanding General, United States Army Combined Arms Center and Fort Leavenworth, Kansas
Jun 85	Jun 86	Deputy Chief of Staff for Operations and Plans, United States Army Washington, D.C.
Jun 86	Jun 87	Commanding General, United States Army Training and Doctrine Command, Fort Monroe, Virginia

PROMOTIONS	DATES OF APPOINTMENT	
	Temporary	Permanent
2LT		4 Jun 57
1LT	4 Dec 58	4 Jun 60
CPT	18 Dec 61	4 Jun 64
MAJ	3 Aug 65	4 Jun 71
LTC	14 Aug 68	4 Jun 78
COL	1 Feb 74	4 Jun 81
BG	13 Jan 77	
MG	1 Jul 80	22 Jan 82
LTG	23 Jun 83	
GEN		1 Jul 86

US DECORATIONS AND BADGES

Distinguished Service Medal
Legion of Merit
Bronze Star Medal with V Device (with 5 Oak Leaf Clusters)
Meritorious Service Medal
Air Medals
Army Commendation Medal (with 4 Oak Leaf Clusters)
Master Parachutist Badge
Joint Chiefs of Staff Identification Badge
Army General Staff Identification Badge

SOURCE OF COMMISSION USMA

SUMMARY OF JOINT EXPERIENCE

Assignment	Dates	Grade
United States/United Kingdom Exchange Officer for duty with British 7th Royal Horse Artillery (Parachute), 16th Parachute Group, Aldershot, Hampshire, England	Dec 63-Feb 65	Captain

* Executive to the Chief of Staff, Army, Office of the Chief of Staff, Washington, D.C.	Sep 76-Aug 77	Colonel/ Brigadier General
* Deputy Chief of Staff for Operations and Plans/Operations Deputy (Joint Affairs), United States Army, Washington, D.C.	Jun 85-Jun 86	Lieutenant General

* Joint Equivalent

As of 23 June 1987

SUPPORT AND DEFEND:

Maintaining the momentum and
Shaping the future of
the United States Army.

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JOINT POSTURE STATEMENT
For Fiscal Year 1989

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by

THE HONORABLE JOHN O. MARSH, JR
and
GENERAL CARL E. VUONO

Foreword

The most fundamental responsibility of this Nation is to assure the safety and security of its citizens. To further this end, the United States must maintain military forces strong enough to deter, or if necessary, combat aggression or coercion directed against the United States or its allies. A strong conventional deterrent requires modern, ready ground forces, trained for joint and combined operations across the range of potential conflicts. To field this ready force and properly shape the future our Nation must have:

☐ High quality, retainable soldiers;

☐ Superb, realistic training and progressive leader development;

☐ An up-to-date doctrine which guides the leader development, organization, training, and modernization of the force;

☐ High quality materiel systems for close, deep, and rear operations that meet the requirements of the unified and specified commanders-in-chief and emphasize placing U.S. strengths against exploitable threat vulnerabilities; and

☐ A research and development establishment that can extract maximum benefit from modern technologies to assure the Army's qualitative edge over potential enemies in the future.

These are not just goals; they are national imperatives.

The FY 89 Budget will allow the Army to meet its highest priority needs, but will cause delays and cancellations in initiatives which would have increased our capability and reduced the risk to our national security. The demands of fiscal responsibility will require us to make the best use of our resources, but cannot obviate the need to meet the security requirements fundamental to the welfare of the Republic.

Carl E. Vuono
General, U.S. Army
Chief of Staff

1775

John O. Marsh, Jr.
Secretary of the Army

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"The deterrence of war is the primary objective of the armed forces." **Maxwell Taylor, 1960**

I. THE ARMY'S STRATEGIC MISSION—Deter, Fight, Win

A. The Army's Role

World history teaches that international diplomacy and goodwill have their limits. In the face of aggression or intimidation, nations must be prepared to defend their interests by force if they are to retain their national sovereignty.

In the modern world, U.S. security interests extend far beyond our own national boundaries. In spite of our size and strength, we cannot stand alone. Without those nations who share our concerns and fundamental values, we would find this a hostile world indeed.

The threats to our interests extend throughout the world as well. With a variety of forces ranging from individual terrorists to massed armies, our adversaries constantly challenge our resolve. *The U.S. strategy to achieve a free and secure world is to DETER WAR by fielding sufficient force to FIGHT and WIN, should deterrence fail.*

In most areas of the world the threat to our interests and our allies stems primarily from land forces. *Our best deterrent to that threat lies in trained and ready land forces of our own.* No other action conveys a nation's resolve so clearly as placing soldiers on the ground in a disputed location. Only ground combat forces can seize or hold ground, or deny it to the enemy. In every U.S. war, the forces on the ground have dictated the timing and conditions for peace.

A strong land force is an integral part of a sound national strategy.

B. The Missions

The Army's strategic role is determined by the worldwide nature of the United States' interest and the type, location, and intensity of the threats to those interests.

To accomplish its strategic role, the Army must be able to project ground combat power worldwide to symbolize the national resolve and execute the national will. Moreover, the day has long passed when any military service might pursue an independent strategy. Our nation depends on joint service planning and unified action to secure its interests and achieve its national security objectives.

The major combat forces of the United States are grouped under the command of Unified and Specified Commanders-in-Chief (CINCs). Assigned forces are tailored to the unique problems and threats of each geographic area.

The CINCs control combat operations, receiving their guidance directly from the President and the Secretary of Defense through the Chairman of the Joint Chiefs of Staff (JCS). For the execution of their orders they depend upon component commanders from each of the military services represented in the command. These component commanders look to their parent services for forces, resources, and administrative support.

While specific tasks are assigned by the Secretary of Defense in the biennial Defense Guidance, the Army's fundamental mission is to provide the CINCs with adequate Army forces which are ready, trained, led, equipped, and able to fight and win in sustained combat.

One of the needs identified by Army plans and addressed by the Army budget is a system to replace the aging Lance missile.

C. Army Vision

To be prepared for such eventualities and fulfill its missions according to our national security strategy, the Army must build a carefully tailored mix of force capabilities with the resources available. The Army must design and field an optimal combination of forces (heavy, light, and special operations), properly postured for the best deterrent effect (forward-deployed and U.S.-based), and taking the best advantage of our considerable reserve capacity (Army Reserve and Army National Guard). In creating this total force the Army's leadership must take into account the current needs of the commanders responsible for our deterrent forces, as well as the obligation to properly shape the Army our Nation will need for the future.

The force that the Army builds to counter the threat to our interests must be able to fight and win in joint and combined operations across the spectrum of conflict, throughout the world. Not so that we become the world's policemen, but so that our potential enemies will know that we have the capability and the national will to defend challenges to our vital interests anywhere. The characteristics that the Army must have to field a ready force today and properly shape the future include:

☐ High quality, retainable soldiers;

☐ Superb, realistic training and progressive leader development;

☐ An up-to-date doctrine which guides the leader development, organization, training, and modernization of the force;

☐ High quality materiel systems for close, deep, and rear operations that meet the requirements of the unified and specified commanders-in-chief and emphasize placing U.S. strengths against exploitable threat vulnerabilities; and

☐ A research and development establishment that can extract maximum benefit from modern technologies to assure the Army's qualitative edge over potential enemies in the future.

D. The Needs

In spite of our Nation's interests and the Army's resulting worldwide missions, Army planning and capabilities are constrained by many factors. Army missions identified by the National Command Authorities (NCA) and land force requirements identified by the CINCs may require more assets than are available. There are simply not enough resources to develop fully adequate defenses in every region simultaneously. The NCA must use regional priorities and plan for sequential operations in the event of multi-theater hostilities. The wide variety of threats, the limitations of even the newest technology, the need to share finite resources with other national objectives, and the limited amount of time available for execution constrain military planners and operators alike.

The Department of the Army (DA) uses the Planning, Programing, Budgeting, and Execution System (PPBES) to ensure the most effective use of resources. Linked to both the Department of Defense (DOD) Planning, Programing, and Budgeting System and the JCS Joint Strategy Planning System, the Army's PPBES:

☐ identifies CINCs' and sustaining base needs for Army forces;

☐ prioritizes them in accordance with national military priorities;

☐ presents them to the Secretary of Defense, the President, and the Congress for approval;

☐ distributes available resources in support of programs that support the Army's missions; and

☐ follows through to ensure execution.

The input of the CINCs is particularly important in both the planning and programing phases. It is also actively solicited during budgeting.

Thus, **Army missions** assigned by the NCA and **warfighting requirements** identified by the unified and specified commanders are systematically developed into **Army programs** and presented in the proposed budget. These needs must be met if the threat is to be deterred, and the Army's strategic role fulfilled.

E. Budget Priorities

The needs identified in last year's FY 88-89 Army Budget were the product of this logical planning process. However, major reductions in the Army's original budget request leave it short of the resources required to fund programs essential to fulfill its strategic role. We were forced to make the difficult decision to reduce or eliminate many previously planned programs. To minimize these risks to our national security the Army applied the following priorities during budget revision:

MAINTAIN ESSENTIAL FORCE READINESS

☐ Priority to forward-deployed and quickly deploying units.

☐ Maintain a trained and ready force.

☐ Attract and retain quality personnel for the force.

☐ Continue to provide for leader development.

PROTECT ESSENTIAL SUSTAINABILITY

☐ Address CINCs' highest priority requirements.

☐ Terminate marginal programs.

☐ Acquire only most urgently needed facilities.

SLOW THE PACE OF MODERNIZATION

☐ Eliminate programs that contribute least to warfighting.

☐ Stretch procurement only where absolutely necessary.

☐ Consider CINCs' views.

☐ Remain cost efficient.

MINIMIZE FORCE STRUCTURE IMPACT

☐ Recognize that the present Army force structure is the least adequate of all the uniformed services in terms of the net threat assessment.

☐ Maintain a robust force for deterrence.

Today's Army has achieved tremendous momentum in its ability to meet the CINCs' essential warfighting requirements. The programs presented in the FY 89 budget are adequate to maintain that momentum in the short run. However, if the budget decline is prolonged, that momentum will be dissipated and our ability to shape a secure future imperiled.

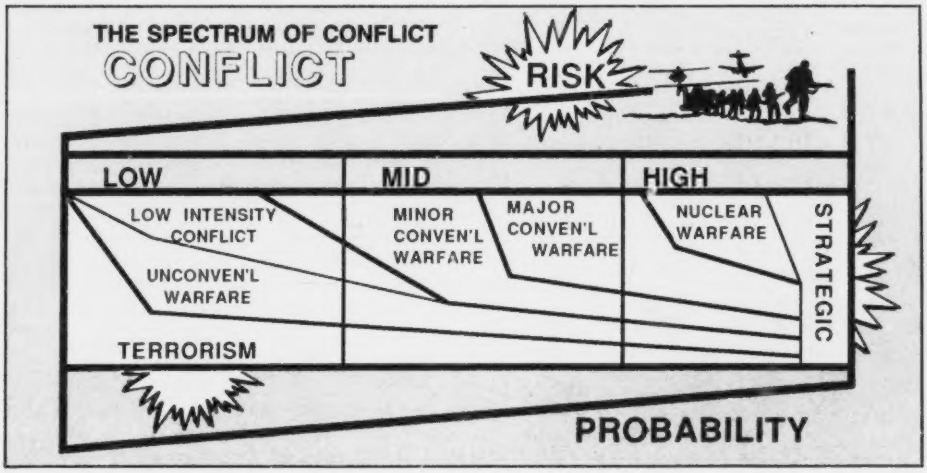
> *"The soundest strategy is to postpone operations until the moral disintegration of the enemy renders the delivery of the mortal blow both possible and easy."*
> *V.I. Lenin*

II. PLANNING FOR THE ARMY'S MISSION—Across the Spectrum of Conflict

A. The Dangerous World

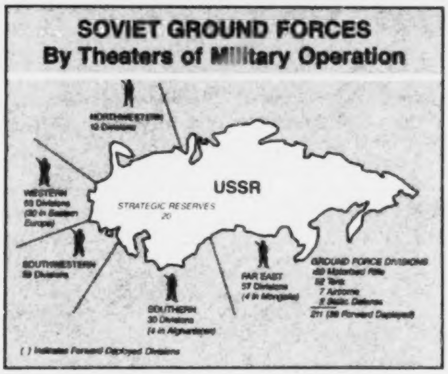
Despite the "new look" Moscow is attempting to put on the face of its political, military, and social affairs, the Soviet Union remains the principal threat to the security of the United States, its allies, and its friends. The flexibility Soviet leader Gorbachev has shown toward arms control and regional conflict resolution is a marked improvement over the methods of his predecessors. The breadth and pace of ongoing Soviet military modernization programs, however, underscore the priority Soviet leaders continue to place on military power. The post-INF treaty environment promises to reaffirm the primacy the Soviets afford their conventional warfare capabilities. The armies of the Soviet Union and Warsaw Pact, however, are not the only potential adversaries the Army must be able to deter or defeat. Small groups using sophisticated means can cause damage and disorder far out of proportion to their size or popular support.

The Army remains an integral component of the U.S. strategic force. As such, our missions require that we possess the capability to respond as needed to a broad range of conflicts anywhere in the world. The military capability of our potential adversaries varies greatly. In many regions, particularly those where Soviet influence is greatest, future U.S. operations could face highly sophisticated weaponry and well-trained forces.

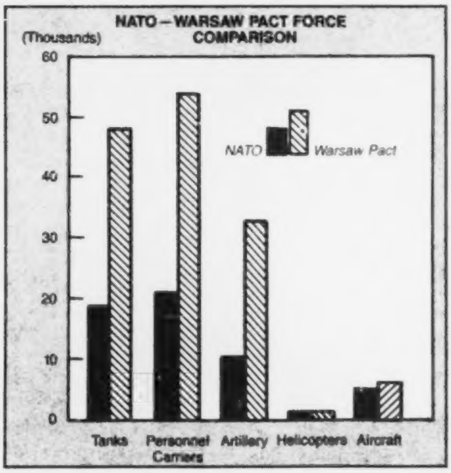


1. THE SOVIET THREAT

The Soviet military machine is by far the largest in the world and there has been no evidence to suggest the Soviet Union intends to reduce its near-term commitment to defense programs, which consume 15 to 17 percent of the Soviet Gross National Product.


SOVIET GROUND FORCES
By Theaters of Military Operation

Over the past two decades, the Warsaw Pact's massive investment in warfighting capability, led by that of the U.S.S.R., has permitted it to achieve significant quantitative force advantages over NATO in areas of both strategic nuclear and conventional weaponry. Modernization programs in all areas have proceeded rapidly. Many improvements are clearly intended to further the capability to conduct fast-paced, large-scale conventional offensive operations in Europe, Southwest Asia, and the Far East.


NATO – WARSAW PACT FORCE COMPARISON

Soviet force development seeks to provide the assets and capabilities required to execute a Theater Strategic Operation (TSO). A standard TSO might call for continuous offensive operations on several fronts to seize objectives up to 1,200 kilometers deep in less than 30 days. In Europe, qualitative and quantitative improvements in Soviet forces designed to successfully conduct a TSO continue to produce an imbalance of forces in the Warsaw Pact's favor. These improvements include:

☐ Enhanced offensive air and air defense capabilities, such as deployment of the FLANKER fighter-interceptor, with its improved capability against low-flying aircraft, and the FULCRUM fighter. Both have increased ranges, enhanced air defense systems, and all-weather capabilities. The deployment of the SA-11 missile in large numbers, and developmental work for the SA-12A long range mobile SAM system, add depth and texture to Soviet air defenses. The approximate Warsaw Pact to NATO ratio for fighter/intercepters is 6:1; including bombers and ground attack aircraft, it is 5:4.

☐ Development and deployment of conventional deep attack capabilities such as highly accurate, short range ballistic missiles (SS-21, 100km range), the BM-27 220mm multiple rocket launcher (MRL) system, improved self-propelled tube artillery systems, and long-range FENCER light bombers. The approximate Warsaw Pact to NATO ratio for MRLs is 4:1; for tube artillery, 3:1.

☐ Continued deployment of the T-80 main battle tank and sophisticated infantry fighting vehicles (IFV) for the essential armored firepower, mobility, and mass to penetrate and achieve their theater strategic objectives. The approximate Warsaw Pact to NATO ratio for tanks is more than 2:1; for armored personnel carriers and infantry fighting vehicles, about 2:1.

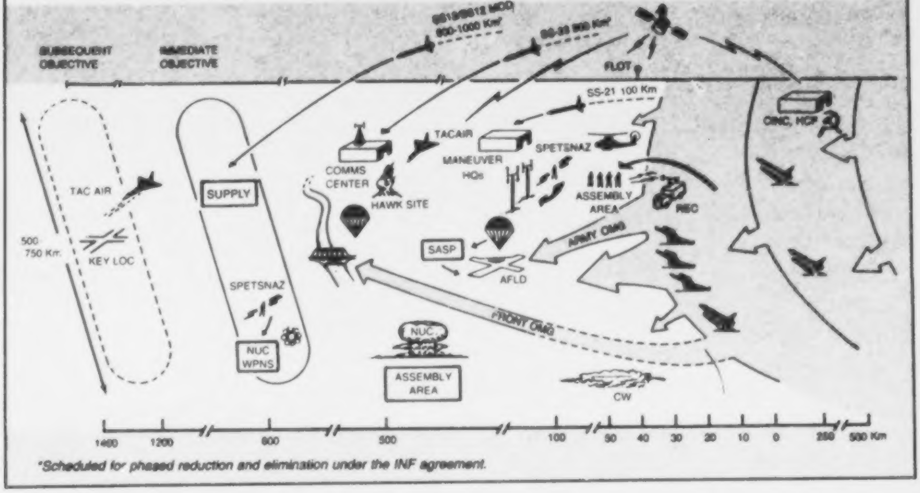
☐ Greater emphasis on training of ground forces soldiers to compensate for the shortcomings of a rapidly rotating conscript force. Training initiatives include better officer/leader training; more and higher quality field time (particularly in the Group of Soviet Forces, Germany), and greater use of simulation.

☐ Focus on enhancement of command, control, communication, and intelligence integration on the tactical battlefield. A near real-time information data link is the immediate goal.

2. THE SOVIETS IN THE THIRD WORLD

While the Soviet military threat to the United States and its allies is greatest in areas contiguous to the U.S.S.R. and its Warsaw Pact allies, our Army

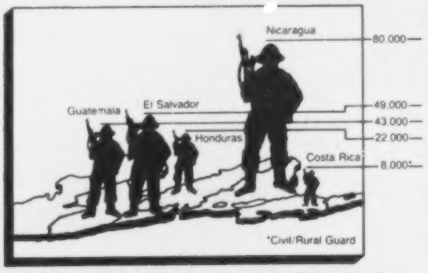
THEATER STRATEGIC OPERATIONS:



*Scheduled for phased reduction and elimination under the INF agreement.

must also be prepared to confront Soviet or Soviet-sponsored forces in areas outside the Eurasian landmass. Along with ongoing improvements in their conventional forces, the Soviets are pursuing a number of programs aimed at upgrading their ability to project military power to distant areas. This effort involves a broad range of activities, including the expansion of air and sea lift for ground forces, increased Soviet access to facilities outside the U.S.S.R., and development of their first conventional aircraft carrier.

ACTIVE DUTY ARMED FORCES 1988



The Sandinista armed forces and security forces dwarf those of Nicaragua's neighbors. The Sandinistas, with Cuban and Soviet-bloc support, have built the largest military in Central America.

The Soviets sponsor an impressive military assistance program that provides military equipment, technical services, and, in some cases, direct operational support to 42 Third World countries. This program is the principal Soviet entree to the Third World and frequently serves to gain political access or the use of key military facilities such as those in Cuba, Vietnam, and Ethiopia.

Another aspect of Soviet involvement in the Third World is the use of surrogate military forces as a means to achieve Soviet political-ideological ends. In Angola, for example, Soviet backed Cuban troops are actively engaged in combat operations to protect a Marxist regime. The U.S.S.R. also provides military, political, and economic support to radical regimes and groups throughout the Third World which engage in terrorism and insurgent operations, and thus promote instability.

3. THIRD WORLD MILITARY GROWTH.

In many parts of the Third World, severe economic problems, fragile governments, and regional rivalries persist. Regional instability and the risks of potential U.S. Army involvement are heightened by an ongoing arms buildup by many nondemocratic Third World countries hostile to U.S. interests. The world map is dotted with wars and simmering conflicts which illustrate the pervasive use of military force to

MAJOR SOVIET EQUIPMENT DELIVERED TO THE THIRD WORLD

1981-1986	Near East & South East	SubSaharan Africa	Latin America	East Asia & Pacific	Total
Tanks/Selfpropelled Guns	3,720	585	500	660	5,465
Light Armor	6,975	1,050	200	660	8,885
Artillery	3,350	1,825	800	530	6,505
Major Surface Combatants	22	4	4	4	34
Minor Surface Combatants	28	18	39	37	122
Submarines Missile Attack	9	0	1	0	10
Missile Attack Boats	10	8	6	2	26
Supersonic Aircraft	1,060	325	110	210	1,705
Subsonic Aircraft	110	5	0	5	120
Helicopters	635	185	130	75	1,025
Other Combat Aircraft	235	70	50	90	445
Surface-to-Air Missile	11,300	2,300	1,300	375	15,275

achieve political change. The trend toward arms proliferation among nondemocratic countries is especially pronounced in the Middle East, where the war between Iran and Iraq has intensified, and states such as Libya and Syria devote enormous sums to arms buildup. U.S. planners must also take into account the availability of increasingly advanced weapons throughout the Third World. Regional arms buildups, which feature some of the world's most advanced weaponry, significantly raise the military, economic, and political costs of U.S. deterrence in the Third World.

The combination of regional military expansion and Soviet adventurism also poses a widespread potential threat to U.S. interests in Latin America. Soviet and Cuban activities in Central America have elevated the danger of confrontation in this region. Today, Cuba's ground combat forces in Latin America are second in size only to those of Brazil. The continued military buildup in Nicaragua, following the pattern set by Cuba in the 1960's, has created a military imbalance in Central America and shows no sign of abating.

In Asia, Soviet-supported Vietnamese expansionism continues to threaten our friends, most notably Thailand. Continued democratization in the Republic of Korea is a positive development, but because of North Korea's belligerent attitude, the potential for conflict on the Korean Peninsula remains high. The Philippines continue to be plagued by a strong Communist insurgency. The major Soviet presence at Cam Ranh Bay extends Soviet naval operational capabilities in the South China Sea, Indian Ocean, and Eastern Pacific Ocean. Indeed, in much of the Far East, Soviet supported or sponsored land forces challenge the integrity of friendly, legitimate governments.

4. TERRORISM

Terrorism poses one of the more immediate challenges to U.S. security interests, obstructing our efforts to assist our allies and friends, and directly threatening the lives of our civilian citizens and soldiers.

International terrorism by radical nations and political groups has become a daily concern to our overseas personnel and facilities. Since 1968, when we began keeping records, terrorists have killed 298 DOD affiliated persons, injured more than 360, and attacked 221 facilities. To protect itself, the Army must continue to improve its own security, as well as its ability to detect and counter terrorists.

5. THREAT SUMMARY

The complexity of the threats for which the Army must prepare is the most dangerous in our history. As the burden of deterrence and defense continues to shift to conventional forces in general and the Army in particular, we must remain constantly ready. The Soviet threat in Europe and elsewhere is dynamic and growing rapidly; it demands that we continue to modernize our own conventional capabilities. Additionally, regional contingencies and lower-intensity conflicts will require special attention. In short, we cannot afford the luxury of preparing for a single type of conflict against a single enemy in a single location. The threat demands, and our mission dictates, an Army fully prepared for battle across the entire range of conflict.

B. Countering the Threats

Army preparations to fight and win on the battlefield are driven by a carefully considered and continually evolving doctrine.

1. AIRLAND BATTLE DOCTRINE

The Army's fundamental doctrine for combat operations is termed "AirLand Battle" in recognition of the inherently joint nature of modern warfare. It prescribes the principles and methods that Army units would use in concert with other services and allies to conduct combat operations.

AirLand Battle (ALB) doctrine considers enemy strengths and vulnerabilities in light of timeless military principles and establishes a comprehensive methodology for Army operations in conjunction with sister services and allies. This approach is reflected in Army doctrinal publications, organization designs, materiel development activities, and training and education programs. The tenets of ALB doctrine are initiative, agility, depth, and synchronization.

☐ Units at every level must seek and retain the *initiative*, setting the terms of battle and causing the enemy to react.

☐ The mental and physical *agility* of the command enables the commander to capitalize rapidly on favorable situations and mitigates the effect of unexpected enemy operations.

☐ The force fights throughout the full *depth* of the battlefield, engaging the enemy at the time and place where it is most likely to cause his defeat.

☐ The commander closely *synchronizes* all aspects of the operation to make the best use of all available combat power.

Modern combat places a premium on the quality of soldiers and their units. The battlefield will be chaotic, intense, and highly destructive, extending across a wide area of land, air, and sea. It will require nonlinear operations, highly lethal systems, heavy reliance on sensors, and advanced communications to control highly mobile forces in fluid situations. Professional leaders and well trained and equipped soldiers will be the key to victory.

By providing a sound comprehensive rationale for the Army's programs to fight and win on the battlefield, ALB doctrine focuses the Army's efforts and assures the most effective and efficient use of available capabilities and resources.

Designed to fight worldwide, day or night, and survive, the AH-64 Apache provides improved agility and firepower on the battlefield.

2. LOW-INTENSITY CONFLICT

Low-intensity conflict (LIC) is a political-military confrontation between contending states or groups below the level of conventional war and above the routine, peaceful competition among states. It involves protracted struggles between competing principles and ideologies. LIC ranges from subversion to the use of armed force. It is waged by a combination of means employing political, economic, informational, and military forces. Such conflicts are often localized, generally in the Third World, but contain regional and global security implications.

Low intensity conflict is of concern to the United States when it is used to attack its national interests, values, political foundations, or those of its friends, or allies. Our Nation counters the threat of LIC through its counter-terrorism policy, political and economic support for developing nations, assistance to governments combating low intensity aggression, support for resistance movements, suppression of illegal drug trafficking, and peacekeeping operations.

3. TERRORISM COUNTERACTION AND ANTITERRORISM (TC/A)

The Army TC/A doctrine provides for defensive measures called Antiterrorism (AT) and offensive measures called Counterterrorism (CT).

The Army has implemented a wide range of measures to defend its personnel and equipment from terrorists. It is also ready to take offensive action against terrorists when appropriate. Physical security, the most expensive aspect of AT, employs technology and construction projects to make potential targets less vulnerable. Army Force Protection funding supplements other physical security funding.

Recent TC/A Program initiatives include:

☐ Expanded threat and protective measures awareness and training for soldiers and family members worldwide;

☐ Improved intragovernmental agency sharing of intelligence and operational information;

☐ Special surveys of vulnerability in threatened areas;

☐ Corps of Engineers AT security design review of all Military Construction, Army planned construction projects;

☐ Establishment of a DA level AT Operations and Intelligence cell for continuous collection of terrorist intelligence, rapid analysis, and immediate dissemination of threat warnings to commands worldwide; and

☐ Worldwide publication of a daily force protection message with threat and operational information to assist commanders and security officers with planning and training.

Excellent host nation support, active countermeasures, an effective awareness program, and the demonstrated capability to strike back have severely limited recent terrorist success against the Army.

4. SPECIAL OPERATIONS FORCES (SOF)

Special Forces, Rangers, Special Operations Aviation, Civil Affairs, and Psychological Operations (PSYOP) units comprise the Army's SOF.

Special Forces are trained and equipped for prolonged operations in hostile areas, and are easily tailored for rapid response throughout the world. These units are area oriented, with unique language skills, and can operate independently or in support of other forces, services, or agencies. Special Forces missions include unconventional warfare, foreign internal defense, strategic reconnaissance/target acquisition, and direct action.

Rangers are highly skilled light infantry employed for individually selected special operations. Ranger missions are accomplished by direct action against

The UH-60 Black Hawk has increased both the speed and the range of helicopter borne troop movement.

time-sensitive targets of high military significance. These missions can be conducted throughout the depth of the battlefield in support of conventional operations, or deep within an unfriendly area in support of national objectives.

Army special operations aviation units provide rotary wing aviation support requiring special skills and equipment.

Civil affairs forces assist commanders in coordinating host nation support and population control, training foreign internal defense forces during peacetime, and providing technical civil assistance to local governments. Civil affairs forces are complemented by PSYOP units which provide warfighting CINCs with propaganda and deception support.

The Army's budget for SOF has continued to expand even with the overall directed budget reductions for FY 89. The SOF budget includes increased funding for AC and RC forces and sustains SOF modernization in the areas of aviation, communications, PSYOP material, and equipment research and development. The Army's SOF budget supports the new Unified Command for Special Operations in its mission of providing combat ready, interoperable, and modernized SOF supporting national objectives.

5. THE ARMY ROLE IN DRUG INTERDICTION

Because of the scope and nature of the threat posed by illegal drug trafficking, the Army has the mission of providing military support to civilian authorities by assisting them with drug interdiction in several specific ways. In response to the 1981 Amendment to the Posse Comitatus Act, the Army cooperates with law enforcement agencies to the maximum extent possible consistent with military readiness and current law.

6. SUMMARY

The key to Army doctrine is flexibility. ALB doctrine provides for mobile and versatile forces to respond with discrimination to a wide variety of threats. It seeks to maximize the effects of current assets by integrating all available resources, whether they are combat elements in a major conflict, or medical teams and PSYOP units in a remote area. It also provides direction for identifying and developing the programs and priorities of the future. The Army's readiness to execute its own doctrine indicates its ability to accomplish joint and combined operations in support of the national military strategy. Today's Army is trained and ready to do just that.

"The battle, sir, is not to the strong alone; it is to the vigilant, the active, the brave."
Patrick Henry, 1775

III. ACCOMPLISHING TODAY'S MISSION—Maintaining the Momentum

The Army has steadily improved as a deterrent force during the past eight years. Improvements in readiness, sustainment, modernization, and force structure have produced significant positive momentum.

Today's challenge is maintaining that momentum.

A. Improvements in Combat Power

The Army's capability to execute its doctrine and fulfill its strategic role is the best in several decades. The Army's readiness and modernization programs have increased the capability of its major combat units significantly since 1980.

The Measuring Improved Capability of Army Forces Study quantifies the effects of improved speed, accuracy, protection, firepower, command and control, and logistical support. Results show that the combat potential of the Army's basic fighting force, the combat division, increased by 63 percent between 1980 and 1987 when measured against a constant Soviet threat. The potential of all of the Army's major Active Component (AC) units—divisions, separate brigades, and armored cavalry regiments—increased by 69 percent.

Most importantly, the quality of soldiers the Army attracted and retained is, by every measure, the highest in our Nation's history. Well educated, highly motivated, fully trained, and superbly equipped, this quality force is the key to the Army's combat power today.

In short, the momentum resulting from wise investment of our Nation's resources is evident precisely where a potential enemy must fear it most—in the improved capabilities of our combat elements.

However, we have much left to do. In FY 89 the AC will be the smallest in a decade. Its quality and warfighting potential must continue to improve if we are to accomplish our national security objectives. Particularly challenging is the demonstrated ability of the Soviet Union to field new capabilities of unprecedented technological quality. At present budget levels we will not be able to continue improving our readiness and modernization efforts. The Army's FY 89 budget is carefully framed to make the best use of available resources for developing and fielding the warfighting capabilities which our CINCs deem essential to assure deterrence or win in combat.

B. Readiness

"The best form of 'welfare' for the troops is first class training." ***Erwin Rommel***

1. TRAINING

Quality training has a direct effect on warfighting skills and combat capability. To emphasize this fact, we have selected "Training" as the Army Theme for 1988. This year's emphasis on training will do much to focus the Total Army — Active, Guard, Reserve, and civilian — on training as our top priority and the cornerstone of combat readiness. Our programs are designed to train leaders, units, and individuals.

LEADER DEVELOPMENT

The wellspring of our Army is its core of trained leaders; the standards of the future Army will be set by the leaders we train today. Appropriately, one of the Army's most important goals is to develop leaders and enhance leadership at all levels.

THE OFFICER EDUCATION SYSTEM: The purpose of the Army's officer education system is to produce AC and Reserve Component (RC) officers who are tactically and technically proficient, and prepared to lead their units in combat. Course content is structured to match the increasing levels of responsibility assumed by officers as they progress through their careers, with emphasis on unified action and strategic study increasing with seniority. The Army believes that well-rounded in-service expertise forms the essential basis for an officer's contribution to joint and combined operations.

☐ *The Military Qualification Standards Program* standardizes some pre-commissioning and company-grade officer training to ensure junior officers are proficient at the common tasks they must know to accomplish assigned missions.

☐ *Functional Officer Advance Courses* provide captain-level training for command and future staff assignments with 20 weeks of branch specific common instruction, followed by up to six weeks of specialty training focused on the officer's next assignment.

☐ The 9-week *Combined Arms and Services Staff School* (CAS3) provides intensive staff training for officers in their sixth through ninth year of service. This course has resulted in a dramatic improvement in the quality of unit staffs throughout the AC. A pilot CAS3 is underway to extend this valuable instruction to RC officers during weekend and annual training.

☐ The *Command and General Staff Officer Course* (CGSOC) is the flagship course of the officer education system. As the last formal schooling for most Army officers, CGSOC is dedicated to the development of leaders who will serve as General Staff officers and field grade commanders. Nearly 1,000 attend the resident course and 15,000 participate in the correspondence program and RC schools annually.

☐ The *Advanced Military Studies Program* (AMSP) consists of a follow-on year of study after the CGSOC, followed by an internship as an operational planner on a division or corps staff. Each year AMSP seeds the force with operational experts of exceptional competence.

☐ *The Army War College* prepares selected lieutenant colonels and colonels for service at the highest levels of the military. Increasing emphasis is being placed on joint professional military education.

☐ *Pre-Command Courses* are conducted at branch schools and the Command and General Staff College (CGSC) for battalion and brigade level commanders.

☐ Several training initiatives focus on the general officer corps. They include: *Pre-Command Training* for commanders and assistant commanders of Army divisions; the *Capstone* course in joint and combined operations taught at the National Defense University; and the 2-week *Flag Officer Warfighting Course* at Maxwell Air Force Base, a joint Army-Air Force course covering the full spectrum of joint and combined combat operations.

THE NONCOMMISSIONED OFFICER EDUCATION SYSTEM (NCOES) ensures uniformly high standards in job proficiency, military occupational specialty (MOS) competency, physical fitness, military bearing, commitment to professional values and attributes, and responsibility and accountability across the NCO Corps. It parallels the officer education system, but focuses more intensively on technical issues, training techniques, and equipment. NCOES includes:

☐ *The Primary Leadership Development Course*, the initial level of NCO training, prepares junior NCOs to teach and lead the soldiers who will fight and work under their leadership.

☐ *The Basic Noncommissioned Officers Course* provides leadership and MOS skill training for sergeants and staff sergeants to lead and train soldiers in small units.

☐ *The Advanced Noncommissioned Officer Course* prepares mid-level sergeants for leadership positions. It includes a common leadership core with intense job-related technical training.

☐ *Functional Courses* prepare selected NCOs for specific duties and responsibilities. Examples include the Operations and Intelligence Course, the Personnel and Logistics Course, and the First Sergeant Course. All such courses are taught at the Sergeants Major Academy in Fort Bliss, Texas; the First Sergeant Course is also taught in Europe.

☐ *The Sergeants Major Course* prepares our most senior NCOs for management and leadership positions of great responsibility throughout the Total Army.

UNIT TRAINING

COMBAT TRAINING CENTERS (CTC) provide battalion task force, brigade, division and corps commanders and their soldiers with demanding training against realistic opposing forces. CTCs include three instrumented field sites and a wargaming program designed to train participants for combat across the spectrum of conflict.

☐ The *National Training Center (NTC)*, located at Fort Irwin, California, is the Army's key stateside facility for training armor and mechanized infantry units. In FY 89, the NTC will train 28 battalion size task forces, including two Army National Guard (ARNG) roundout battalions. The most significant feature of the NTC is its realistic battlefield conditions, which include extensive use of Air Force close air support. When funded, follow-on systems will allow the Army to conduct instrumented air defense against opposing enemy air forces.

☐ The *Joint Readiness Training Center*, designed to train non-mechanized infantry forces for low- to mid-intensity conflict, is one of the Army's newest CTC initiatives. Training is conducted primarily at Fort Chaffee, Arkansas. The first battalion participated in a pilot rotation in October 1987. Plans call for six more battalions to be trained this year with an increase to 13 battalions by FY 89.

☐ The *Battle Command Training Program (BCTP)* complements the capstone of the Army's unit training programs. It provides division and corps commanders and their battle staffs with intensive training in wartime duties without costly maneuvering by soldiers and equipment. BCTP begins with a 3 to 5 day seminar covering current doctrine, threat updates, decision exercises, and simulation familiarization. It concludes with a realistic 9-day wargaming exercise which features a full-time observer/ controller staff, and a comprehensive after action review. BCTP can be conducted at Fort Leavenworth or at any other installation with an operational Corps/Division Battle Simulation System.

IMPROVEMENTS IN COMBAT POWER
— Training —

	Since 1980
Battalion Rotations thru Combat Training Centers	143
RC Personnel Trained Overseas (Overseas Deployment Training)	186,000
Unit Conduct of Fire Trainers Fielded (Tank Gunnery Simulator)	90

☐ The *Combat Maneuver Training Center* (CMTC) at Hohenfels Training Area, Germany, will offer NTC style training for U.S. Army Europe (USAREUR) battalion task forces within the constraints of the European environment. With an opposing force battalion to be stationed at Hohenfels, the CMTC will be fully operational by FY 91.

The ARMY EXERCISE PROGRAM includes joint and combined exercises sponsored by the JCS or one of the unified or specified commands worldwide, as well as unilateral Army exercises conducted at corps level or below. These exercises allow Army units to conduct total force training in their wartime mission, joint operations with other services, and interoperability training with our allies. Every major JCS exercise includes significant RC participation.

Deployment training exercises provide invaluable training to units based in the Continental United States (CONUS). Troops and equipment are deployed and exercised in such varied environments as Europe, Korea, Southwest Asia, North Africa, the Pacific, and Central America.

In FY 89, the Army is scheduled to participate in nearly 50 JCS exercises. Some of the more significant are:

☐ REFORGER 89 will involve deployment of more than 10,000 AC and RC stateside soldiers to Germany;

☐ TEAM SPIRIT 89 will exercise combat readiness of Korean and U.S. forces to include Capstone aligned AC and RC forces from the United States and the Pacific;

☐ BRIGHT STAR 89, a large-scale U.S. Central Command exercise, will emphasize rapid deployment, mobility, host nation agreements, and the combat readiness of CONUS-based forces.

☐ FUERTES CAMINOS, AHUAS TARA, and CABANAS are joint/combined exercises which deploy AC and RC units to Central America to conduct training not available elsewhere. The exercises demonstrate U.S. commitment, assure Latin American nations of U.S. resolve, and provide visible evidence of Army mobilization capability. Significant participation of RC forces (primarily engineers) in these nation-building exercises will continue.

SPECIALIZED INDIVIDUAL TRAINING

The DEFENSE LANGUAGE INSTITUTE FOREIGN LANGUAGE CENTER (DLIFLC), offering 55 languages and dialects, ensures that a sufficient number of qualified linguists are available to meet DOD worldwide requirements. More than 4,000 students from all services receive language training annually. The DLIFLC program is critical to the Army's peacetime liaison and interoperability efforts, as well as to our national intelligence program.

The FOREIGN AREA OFFICER (FAO) PROGRAM provides personnel for key positions requiring foreign language skill, regional expertise, special political-military knowledge, and professional military experience. The Army designates approximately 130 officers into the FAO specialty annually. Each officer must undergo a rigorous 3 to 5 year program, including language training, graduate schooling, and an in-country training assignment. The expertise represented by this pool of officers contributes directly to the success of our increasingly important political-military initiatives worldwide.

RESOURCES—OPERATING TEMPO (OPTEMPO)

OPTEMPO is a means of measuring the operating and sustaining resources associated with a particular training strategy. By establishing a specific OPTEMPO, the Army can allocate a specific amount of resources for training and support, and predict the resulting readiness level. Supportable OPTEMPO depends upon synchronized resources for training, procurement funded spares, and depot maintenance. The Army is also working toward quantifying the important role played by supply and transportation activities. Ground OPTEMPO is expressed as an annual operating rate in miles/hours for major items of equipment.

The Armywide ground OPTEMPO of 850 miles for the AC which was requested in the FY 88-89 President's Budget would have achieved a "fully trained" readiness level. However, the FY 88 appropriation reductions in operating and sustaining areas require that the AC average be cut to 725 miles. We will strive to maintain current high levels of training readiness, but programs throughout the force must be adjusted to reduce equipment intensive training and provide for adequate sustainment support. The amended FY 89 Budget provides for AC ground OPTEMPO to be restored to 850 miles.

Air OPTEMPO expresses the number of hours flown by a crew per month in rotary wing aircraft assigned to the combat units of Major Army Commands (MACOMs), ARNG, and U.S. Army Reserve (USAR). Required OPTEMPO reflects total flight hours per month needed for minimum training and mission support; allocated OPTEMPO indicates total hours provided by the budget. For FY 89, the required air OPTEMPO for AC and RC units is 15.8 and 9.8 respectively. The FY 89 Budget will allow the full 15.8 hours for the AC, but only 8.8 for the USAR and 7.8 for the ARNG.

A supportable OPTEMPO requires:

☐ the acquisition of procurement funded spares two years prior to the year of operation;

☐ the availability of spares already in the inventory a year prior to operations; and

☐ the funding of Wholesale and Retail Supply Activities programs during the operating year for support of the force. Achievement of our designated OPTEMPO levels depends on adequate resources for both the operating accounts and the associated support programs. Isolated funding restrictions in any of these areas disrupt our ability to achieve the planned OPTEMPO.

THE TRAINING SUPPORT SYSTEM

Training support provides the physical resources required to conduct quality training at every level.

TRAINING DEVICES AND SIMULATORS provide effective and efficient methods of sustaining training proficiency through the innovative application of technology. Training devices and simulators can never replace the experience gained through maneuver and live fire exercises, but they can compensate for training constraints such as environmental restrictions and reductions in traditional training resources. For example, a precision laser gunnery system for tanks and Bradley Fighting Vehicles (BFVs) allows crews and units to sustain gunnery and command and control skills in local training areas without expending costly live ammunition.

BATTLEFIELD TRAINING SIMULATIONS offer an important training tool to achieve and maintain warfighting proficiency at every staff level. Fielding of the initial corps level simulation was completed early last year, and standardized simulations for divisions and the full range of combat support and combat service support units will be boosted by the Army's fielding of the Battalion and Brigade Simulation this year. All of these simulations may be integrated with traditional field exercises to increase the intensity and realism of staff training.

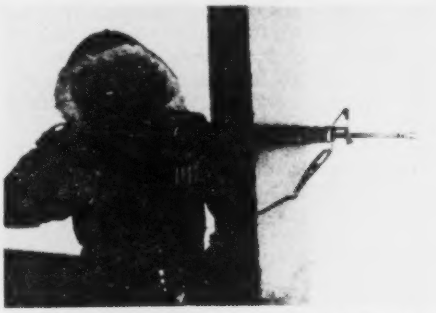
Range Construction Upgrade	MOUT Complex Construction	MCA Range Modernization Funding
FY 84		
Ft. Hood, TX Ft. Riley, KS Ft. Bliss, TX	Ft. Pickett, VA	$100M
FY 85		
Ft. Stewart, GA Ft. Bragg, NC Cp. Casey, ROK	Ft. Hood, TX Ft. Ord, CA	$76M
FY 86		
Ft. Hunter-Liggett, CA Ft. Campbell, Ky Ft. Carson, CO Yakima Firing Ct., WA	Hohenfels, FRG	$91M
FY 87		
Ft. Polk, LA		$80M
FY 88		
Pohakuloha Trg Area, HI Gowen Field, ID	Ft. McClellan, AL	$44M + $15M*
FY 89		
Cp. Grayling, MI		$24M + $14.5M*

*New targetry

RANGE MODERNIZATION PROGRAM: While sophisticated simulations are effective at improving combat readiness and lowering training costs, nothing can replace the experience of using Army equipment in the field. The ultimate goal of the range modernization program is to produce crews trained to make maximum use of the Army's new family of weapons systems, such as the M1 Abrams tank, the M2/M3 BFV, and the AH-64 Apache helicopter. Major initiatives include:

☐ The ***Multipurpose Range Complex*** (MPRC), the key range facility for weapons training, provides a multitude of challenging gunnery exercises for armor and mechanized infantry platoons, as well as dismounted infantry and attack helicopter scenarios. Fourteen of eighteen planned MPRC will be completed or be under construction by FY 89.

☐ *Standardized Military Operations on Urbanized Terrain* (MOUT) facilities teach the specialized skills required for fighting in cities and towns. Five of sixteen MOUT complexes will be completed by FY 89.



☐ *Standardized ranges* are designed to improve the training and qualification of individual soldiers armed with rifles, pistols, machine guns, and grenade launchers.

☐ *Standardized targets* portray realistic infantry, armor and helicopter threat scenarios for live-fire training.

TRAINING AMMUNITION: Efforts to improve forecasting and management of training ammunition include the publication of a new Standards in Weapons Training manual. In conjunction with the increasing availability of sophisticated simulators, this program requires less live firing of weapons while maintaining readiness. The result is a significant savings in ammunition and money. Developing and implementing new methods to project expenditures more accurately are priority efforts for FY 89.

COMPUTER-BASED INSTRUCTION (CBI) holds great potential for training tasks which otherwise would be too complex (battalion level tactical engagements) or too expensive (satellite equipment repair) to conduct. The most far reaching CBI program is the Electronic Information Delivery System (EIDS), which will place computer-controlled video disc systems in Army schools to deliver individual instruction more quickly and in more depth than was previously possible. The first 1,800 EIDS systems are scheduled to be delivered by the beginning of FY 89.

RC SPECIFIC TRAINING ISSUES

The assignment of appropriate missions to the RC continues to be a cost effective means of expanding Total Army readiness and mobilization capacity. An RC Training Strategy Task Force is seeking innovative ways to improve RC training and use of resources. Some of the most important current training programs are:

OVERSEAS DEPLOYMENT TRAINING (ODT), a highly visible demonstration of the Nation's resolve to support overseas commitments, provides the RC realistic training while rehearsing deployments to support CINCs worldwide. In conjunction with ODT, units conduct mobilization-deployment activities, tailor peacetime training to wartime mission requirements, strengthen Capstone associations, improve combat readiness through demanding realistic training, and assist friendly nations through nation-building projects. Participation has increased from 3,500 soldiers and approximately 200 units in FY 81 to more than 48,000 soldiers from 2,700 units in FY 88.

MOS QUALIFICATION IN THE RC: An FY 87 study emphasized that a number of RC units were not combat ready because many of their soldiers were not qualified in their MOS. Problems were concentrated in combat support and combat service support areas. Attrition and turbulence were significant contributors to the problem. Some specific actions now underway to address these problems are: providing weekday preparation to improve weekend training; linking USAR schools with Training and Doctrine Command subject matter experts; attending to individual pay and reenlistment issues; conducting a detailed review of military and civilian documentation for awarding of an MOS. These efforts, many of them involving Full Time Support (FTS) personnel, are producing a steady improvement in RC MOS qualification.

REGIONAL TRAINING SITES - MAINTENANCE (RTS-MAINT) will offer transition and sustainment training for RC maintenance specialists during peacetime. This program will enhance the Army's ability to mobilize and deploy RC maintenance companies capable of maintaining our most modern systems in combat.

There are two categories of RTS-MAINT. The first provides individual level training for personnel from units within 250 miles of the site. The ARNG prototype site was activated last year at Fort Dix, New Jersey; more than 4,400 ARNG, USAR, and AC personnel will train there in FY 89.

The second type of facility, called a High-Tech RTS-MAINT, will provide highly technical communications/electronics training. The first of these sites is scheduled to open at Tobyhanna Army Depot, Pennsylvania, in FY 89.

Each RTS-MAINT location requires six full-time Active Guard/Reserve (AGR) personnel; constraints on the Full Time Manning program will have a direct effect on RTS-MAINT staffing and full utilization of this program.

REGIONAL TRAINING SITES-MEDICAL (RTS-MED) will provide a cadre, medical equipment, and the other assets required to conduct training for deployable medical hospitals and medical units. The cadre will conduct doctrine, tactics, new equipment, and sustainment training for reserve units equipped with the new Deployable Medical Systems. The RTS-MED will consist of a standard five acre training site and building complete with classroom space, a biomedical equipment maintenance facility, administrative offices, and warehouse space to store and assemble a 400-bed evacuation hospital. Seven RTS-MED are planned.

2. PERSONNEL

"In war the moral is to the material as three is to one." ***Napoleon***

The ability of our Army to perform its strategic role is directly dependent upon the quality of our personnel. To ensure that the Total Army is adequately manned to perform its mission in peace and war, we must provide for:

☐ The right numbers of soldiers, of the requisite quality, in the proper skills;

☐ Military and civilian career forces in the correct proportions and aligned by grade;

☐ The ability to transition smoothly from peace to war;

☐ Ethical and professional leadership of stable and cohesive units; and

☐ Quality support and equal opportunity for soldiers, family members, and civilians.

RECRUITING AND RETAINING QUALITY SOLDIERS:

FY 87 marked the fourth straight year that more than 90 percent of the Active Army's new non-prior service (NPS) recruits were high school diploma graduates. NPS enlistees scoring in the top three test categories (TC I-IIIA) of the Armed Forces Qualification Test increased to 67 percent, while those scoring in the lowest allowable category (TC IV) followed a 7-year downward trend from 52 percent in FY 80 to 4 percent in FY 87. These same healthy trends are present in the RC.

However, maintaining a high quality force in the future will not be easy in the face of a declining pool of quality manpower, a widening disparity in pay comparability, and reductions in recruiting resources. The success of the past is a direct result of adequate funding for such Army incentives as educational benefits and cash enlistment bonuses. The restoration of the GI Bill was particularly effective in this regard. Adequate funding of recruiting support, advertising, pay, and incentives programs is essential for continued success in recruiting the quality soldiers who will become our innovative leaders and technicians in the future. Additionally, the 4.3 percent military pay increase envisioned for FY 89 is an important first step in restoring comparability and ensuring the viability of our deterrent force.

The declining youth population of the early 1990's will make it essential for the Army to increase its retention rate of high quality soldiers. The Active Reenlistment Program focuses on retaining sufficient quantities of performance-oriented soldiers who possess leadership potential and the skills required to meet the needs of the career force. The AC achieved its aggregate reenlistment goal for FY 87. The reenlistment efforts in FY 88 will be focused on retention of high quality soldiers. In this effort, the Army will target bonuses by grade/MOS and require retraining/reclassification for those reenlistment eligible soldiers in overstrength specialties.

An increased demand for AC NCOs is driven by the transition to new Army-wide standard organizational designs, the leader-intensive Army of Excellence (AOE), and by force-wide modernization. In past years, poor retention and the addition of many new units under AOE created severe imbalances. Through an aggressive Enlisted Force Alignment Plan which orchestrates promotion, reenlistment, and reclassification by grade and specialty, the shortage of AC NCOs in our most important unbalanced specialties was reduced from 28,800 in FY 84 to 10,300 in FY 87. The number should be even lower in FY 88. The result is a dramatically improved readiness posture within the Army.

The Army's offer of educational opportunities is a proven tool for recruiting and retaining high performance soldiers. We capitalize on the desire for self-improvement by offering instruction at remote sites, skills programs, career advancement, and documentation programs for skills already learned. From the Army's standpoint, education is essential for developing the skills our soldiers need to lead the future force.

Adequate compensation and facilities are essential to retain the highly qualified soldiers who are the Army's future NCO leadership. Military pay will lag behind pay in the private sector by 10.5 percent in FY 88. If this adverse trend is not reversed, retention will suffer. New and improved facilities and programs for soldiers and families have had a positive impact on retention and readiness over the last few years.

In the RC, the Selected Reserve Incentive Program (SRIP) has been a primary factor in the successful enlistment of high quality NPS soldiers. The SRIP offers an enlistment bonus of up to $2,000 for high school graduates enlisting in high priority RC units or in critical skills for six years and $1,250 for three years. Also, a SRIP affiliation bonus of up to $3,600 is provided to soldiers who transfer to a ARNG or USAR unit upon leaving the Active Army.

In FY 87, the Army implemented Transition Management which connects Army retention, job assistance, career counseling, and education systems with civilian agencies. The program is built on two truisms: first, soldiers who have realistic information concerning civilian job opportunities and Army benefits frequently reenlist; second, soldiers who decline to reenlist and are assisted in their transition into civilian jobs or schooling are most likely to enlist in RC units, and are more likely to serve as adjunct recruiters for the Army in the civilian community. As a result of this new program, 9,452 soldiers made the transition to the ARNG, 9,753 to the USAR, and 4,538 to the Individual Ready Reserve in FY 87. This represents an increase of 18 percent over FY 86. This program is yielding significant savings in recruiting expenses and training costs while providing quality soldiers to the RC and increasing Total Army readiness.

HUMAN RESOURCES

The goal of the *Army Health Promotion Program* is to improve personnel readiness, productivity, and morale by promoting a healthier lifestyle for members of the Total Army. The program coordinates health efforts in the areas of physical conditioning, weight control, nutrition, tobacco use, stress management, drug and alcohol abuse, and suicide prevention. We are striving to conduct health risk appraisals on all soldiers within the next 24 months.

The *Army Alcohol & Drug Abuse Prevention & Control Program* fosters the prevention, identification, and treatment of alcohol or other drug abuse. Key to the Army's "War on Drugs" is the drug testing program, the major single deterrent to illegal drug use. FY 89 programs will follow through on FY 88 initiatives including implementation of the President's Drug Free Workplace Plan, drug testing for the USAR and ARNG, and testing of all Armed Forces applicants. Thanks to aggressive Army programs, the drug abuse rate is down from 36 percent to less than 2 percent in less than a decade.

Current policy concerning *Human Immunodeficiency Virus and AIDS Infection* prohibits individuals with the virus from enlisting in the military service. Members of both the AC and RC are tested periodically. Active Duty soldiers who show serologic evidence of infection receive extensive evaluation, psychological support, and treatment if necessary, and are medically separated or retired when disabled.

OFFICER REDUCTIONS

Between 1980 and 1985, the Army increased its officer corps by approximately 11,400. This growth was a direct result of the Army's commitment to improve its readiness posture. While maintaining a relatively constant active end strength of approximately 781,000 soldiers, the Army increased the number of combat units, the density of its combat leadership and its capabilities in critical specialty areas.

Of the 11,400 growth in officer end strength, 9,400 was among commissioned officers and 2,000 among warrant officers. Eighty-three percent of commissioned officer growth was at the company grade level—captain and lieutenant. Most of this was in the basic branches which make up the Army's combat units. Similarly 64 percent of warrant officer increases can be attributed to a parallel growth in combat units. Field grade ranks (major through colonel) accounted for only 17 percent of commissioned officer growth; 97 percent of field grade growth was in the medical branches, and was the direct result of a 1979 congressional mandate to increase the number of Army doctors and nurses.

The FY 87 National Defense Authorization Act directed DOD to reduce its commissioned officer end strength by six percent from the end FY 86 active duty strength. Reductions were to occur at the rate of one percent in FY 87, two percent in FY 88, and three percent in FY 89. The law also called for the Secretary of Defense to apportion the reductions among the Army, Navy, Air Force, and Marine Corps. The Army's apportionment for FY 87 was a 1.5 percent reduction or 1,635 commissioned officers from FY 86 endstrength.

In FY 88, our strength will be reduced by an additional 1,514 officers; this will require the involuntary separation of many officers with combat experience. Unless the Army is granted relief from these serious cuts, we may be required to complete a reduction totaling as many as 8,000 officers (7 percent) by FY 90. These personnel losses will cause significant degradation of morale, combat capability, and the Army's ability to conduct combat operations in accordance with the leader intensive AirLand Battle.

Enlisted women serve in 318 of 365 military occupation specialties.

WOMEN IN THE ARMY

The number of women in the Army has increased dramatically in the last 25 years. Since FY 60, AC female strength has grown from 4,250 officers and

8,279 enlisted soldiers to about 11,600 officers and 72,000 enlisted. USAR figures show the same trend with women comprising 22 percent of the force (9,700 officers and 49,000 enlisted). In the ARNG, more than 5 percent of the force is female, with 2,700 officers and 22,600 enlisted.

Army policy is that women will be provided full and equal opportunity to pursue appropriate careers and will be assigned in all skills and positions except those which, by doctrine, mission, or battlefield location, involve the highest probability of direct combat with enemy forces. The method for identifying these positions is contained in the Army's Direct Combat Probability Coding System.

FULL-TIME SUPPORT (FTS) PROGRAM

The FTS program is the framework upon which the readiness of the RC is built. It employs a relatively small number of full-time workers to perform planning and administrative tasks so that the bulk of RC soldiers can concentrate on quality training during their limited duty time. Four categories of personnel form the RC FTS team:

☐ AC soldiers bring experience and expertise from the AC to support force modernization and fill full time positions for which no RC soldiers are available;

☐ Military technicians, required by law to be members of the unit they support, provide administrative, training and logistical support plus continuity and institutional knowledge.

☐ AGR soldiers provide full time administrative, recruiting, training, and logistical support to units; and

☐ DA civilians provide administrative and clerical support.

The requirement for some RC units to mobilize and deploy rapidly mandates increased levels of full time support. As in FY 88, however, the prioritized FY 89 budget does not provide for enough personnel to fulfill the FTS mission.

CIVILIAN MEMBERS OF THE ARMY TEAM—A MAJOR COMPONENT OF THE FORCE

Our civilian work force of more than 400,000 employees is a key component of the Total Army. Comprising most of the Army's sustaining base, civilians perform critical functions in logistics, research, procurement, medical support, communications, training, depot and installation maintenance. The civilian work force is a cost effective way to meet Army mission requirements without diverting soldiers from other missions. A reduction in the civilian work force will cause a return to "borrowed military manpower" and a corresponding reduction in tactical unit readiness.

The Army has made great strides in assuring that the civilian work force is properly trained, managed, and led. Some specific initiatives include:

MODERNIZATION: In a massive, long-term undertaking, the Army has committed itself to improving the leadership of the civilian members of the Total Army and improving the personnel management system supporting that leadership. The Army has recently reduced internally generated civilian personnel regulations by over 50 percent, and increased the delegation of personnel management authority to commanders.

The ARMY CIVILIAN TRAINING, EDUCATION, and DEVELOPMENT SYSTEM includes technical, managerial, and leadership training coupled with follow-on growth assignments. Its objectives are to:

☐ Provide systematic and progressive training and development of Army civilians from intern through senior executive level;

☐ Develop an awareness of the broader scope of Army mission requirements; and

☐ Ensure that the Army is able to meet its current and future professional and technical requirements with competent people.

3. RESERVE COMPONENT READINESS

The Total Army's growing reliance upon the RC reflects its improving competence and professionalism. The RC is no longer merely a supplement to the Active Army. Today it is an essential element, rounding out key divisions of the Total Army with some RC units deploying before those of the Active Army. Reserve units train worldwide wherever the Active Army trains. In recent years, Guard and Reserve units have built and repaired roads and bridges in Panama, Ecuador, and Honduras. These missions not only provide superb training opportunities, but also assist the local populace and send a clear message of preparedness to our friends and adversaries.

Given the major role the ARNG and USAR play in the Total Army's wartime mission, the readiness of RC personnel and equipment is of critical concern. While a number of programs contribute to that readiness, four deserve special note.

EQUIPMENT REDISTRIBUTION

The ARNG's Equipment Readiness Analysis (ERA) program projects Army Unit Readiness Reports against the Total Army Equipment Distribution Plan to compute both current and future equipment on hand readiness. It then identifies equipment that can be moved to improve the readiness of high priority units without degrading the readiness rating of the losing unit. While ERA cannot offset the ARNG's $9 billion shortage of required equipment, it does make maximum use of assets already provided. Since 1986, ERA has raised 432 units to a deployable status; estimates indicate that the readiness of an additional 100 units will be improved.

The USAR is conducting a similar equipment cross-leveling program which has improved the readiness of 379 units. Equipment shortages continue to be a major problem in USAR units, but the cross leveling program does optimize the use of equipment on hand.

The USAR's Minimum Essential Equipment for Training (MEET) program specifically addresses equipment shortages that impair unit training. Unit commanders identify unavailable equipment which is essential to mobilization, deployment, or combat training. DA provides this equipment as a high priority, either through redistribution or limited procurement. Equipment provided under MEET is limited to 10 percent of a unit's authorized quantity of that item. By the beginning of FY 88, 63 percent of MEET requests had been shipped.

MOBILIZATION

The Army's wartime plans depend on large numbers of individual replacements early in the mobilization process. These early replacements must be pre-trained and, where possible, preassigned. Our primary source of such soldiers is in the retired ranks and the Individual Ready Reserve (IRR).

The IRR consists of soldiers who are still completing their military service obligation after AC or RC duty. The current pool of 287,500 soldiers is expected to decline by about 1,500 in FY 89. In the past, these soldiers have been required to participate in an annual muster to verify their availability and readiness, and many voluntarily train in schools or active units. However, funds are not currently available to conduct the annual screening in FY 89.

Retirees remain subject to recall to active duty after leaving service. This group of 503,000 soldiers has been classified by age and degree of physical limitation; 124,000 of them have already been given assignment orders to specific duty locations. They will fill shortages while freeing AC soldiers for deployment to more critical assignments.

MOBILIZATION EXERCISE PROGRAM

As reliance on RC forces to provide units on short notice has increased, so has the importance of RC mobilization exercises. USAR participation in biennial command post mobilization exercises has grown accordingly, and the ARNG mobilization exercise program for FY 87 was the most ambitious in ARNG history. Many of these exercises are conducted in conjunction with ODT, making them both more realistic and more demanding. In our most complex endeavor, Operation GOLDEN THRUST 88 mobilized nearly 14,000 RC soldiers from 115 units in the largest mobilization exercise of Reservists since World War II.

These exercises have helped us to identify and resolve problems in planning, procedures, training, equipment, facilities, and transportation. However, given the reduced FY 89 funding levels, the RC will be forced to reduce participation in such exercises, delaying mobilization and deployment training for units and increasing the response time of the RC as a whole.

RESERVE COMPONENT AUTOMATION SYSTEM (RCAS)

RCAS will allow the RC to access necessary data bases and obtain current information to mobilize rapidly. In addition, the system will automate peacetime unit administration, releasing RC soldiers from manual administrative duties and allowing them more time for mobilization training.

4. QUALITY OF LIFE (QOL)

Quality of Life is a readiness issue. QOL encompasses programs, facilities and services which have an impact on the living and working conditions of soldiers and their families. The QOL provided to soldiers and their families is directly related to their efficiency on the job, their likelihood to remain in the Army, and the readiness of the Total Army.

Progress has been made in this area, but much remains to be done. Although the Army has significantly slowed the pace of new facility construction in the face of budget constraints, physical fitness centers, child care facilities, and improved barracks are still critical needs. Family programs must be expanded to provide a minimum standard service to soldiers and families at all locations. Family housing and medical care are consistently cited by Army families as problem areas, and improvements in those areas are critical.

Quality of Life takes on new importance as the Army looks to attract and retain the soldiers of the future. By maintaining the quality of the force, QOL programs represent a wise investment in the future force. Insufficient support of QOL programs may have a major negative impact on retention, and ultimately on Army readiness.

ARMY PHYSICAL FITNESS PROGRAM

Physical fitness is essential to combat readiness. Following through on the Army Theme of 1981, we

Child Development Centers provide an alternative when parental responsibilities and mission requirements conflict.

have designed a broad-based Physical Fitness Program which has raised the general fitness level throughout the Army. Graduates of the Master Fitness Course serve as special staff assistants to unit commander's where they can adapt local programs to local conditions. The 40 and Over Cardiovascular Screening Program ensures that soldiers of all ages are involved in physical fitness training and are required to meet specific performance standards. However, Army initiatives extend beyond unit oriented physical training to include health and life style modification programs. Diet, stress, and exercise are addressed in an effort to raise overall readiness by improving individual fitness.

FAMILY SUPPORT

The ARMY COMMUNITY SERVICES PROGRAM is the cornerstone of family programs. The FY 89 Budget will continue standardization of personnel and services programs. Significant progress is being made in identifying exceptional family members, extending preventive services to junior enlisted families, reducing relocation stress, and training soldiers to manage personal finances better.

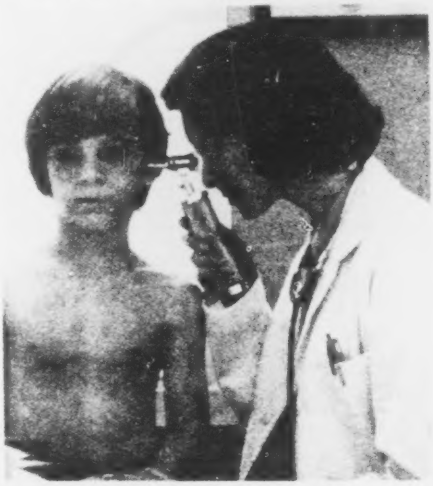
CHILD DEVELOPMENT SERVICES (CDS) provide center-based and quarters-based child care to reduce the impact of parental responsibilities on unit mission requirements. In FY 86 more than 138,000 children benefited from this service, yet demand still exceeds capacity. The Army continues construction to meet these demands. The Family Child Care Program also continues to expand with 6,659 homes registered in FY 87.

The changing focus of YOUTH ACTIVITIES (YA) from a sports oriented program to a Youth Development Program is a significant step in the Army's family program. One example is the School-Age/Latch Key Program, a joint YA and CDS program; it offers developmental and recreational programs to children 5-18 years of age, before and after school and in other special situations.

MORALE, WELFARE AND RECREATION (MWR)

MWR encompasses programs and activities provided to soldiers and their families to create an Army community similar to those other Americans enjoy. Funding support varies according to each program's impact on readiness, with mission sustaining activities primarily supported by appropriated funds from the government, and business activities supported with nonappropriated funds (NAF) generated by sales to soldiers and their families.

NAF funds are used for facilities not normally funded by taxpayers in a civilian community. These include youth centers, clubs, and bowling centers. A projected total of $1 billion of NAF construction will be completed by the end of FY 92, directly contributing to the Army's present and future ability to compete for quality personnel.



The Army is reviewing its MWR mission to reduce appropriated fund support to business activities. Business activities Army-wide are being reoriented to ensure they meet the needs of the modern soldier and operate with minimal appropriated fund support.

While business activities may be self sustaining, many MWR activities essential to the Army mission and community cannot operate without appropriated funds. These include physical fitness, library, and child development services. Failure to fund these programs will mean the elimination of services vital to attracting and retaining the quality force of the future.

THE COMMISSARY PROGRAM

Army commissaries play a key role in maintaining morale and high quality of life for the Army family. The commissary construction program provides for replacement or modernization of commissaries from surcharge funds paid by commissary patrons. In FY 88 and FY 89 the Army plans to spend $126 million in surcharge funds on replacements and major renovations of 19 commissaries worldwide. As of October 1, 1987, Forts Rucker, Bragg, Drum, and Polk, Lexington Blue Grass Army Depot, Presidio of San Francisco, Yuma Proving Grounds, and Walter Reed Army Hospital in the United States, Yongsan in Korea, and Robinson Barracks, Patch Barracks, Fuerth, and Wuerzburg in West Germany were undergoing commissary upgrades purchased with surcharge funds. FY 89 funding will provide for upgrading eight commissaries overseas.

DINING FACILITY MODERNIZATION/CONSTRUCTION

Dining facilities are an important part of the Army effort to improve soldier quality of life. The Dining Facility Modernization/Construction Program is a DA initiative to upgrade 167 troop dining facilities by providing modern food service equipment, serving lines to support regular and short order menus, and a contemporary dining environment. It also provides for new facilities where existing facilities have deteriorated beyond repair, and supports force structure changes and unit activations. Full funding of this program will construct or upgrade 32 dining facilities by the end of 1994. The deteriorated state of these facilities has a direct impact on troop morale, soldier retention, and readiness. Failure to fund the program adequately would deprive the soldiers of quality food service they have a right to expect and we have an obligation to provide.

FAMILY HOUSING

The availability of suitable and affordable family housing for all soldiers and families remains one of the Army's top priorities. During the past five years, Army families have benefited from a commitment by the Army to fund fully the cost of operating and maintaining the family housing inventory and of acquiring additional government quarters when the civilian community does not provide adequate and affordable housing. "Build to Lease" programs have proven particularly successful, providing almost 7,500 family housing units.

In the face of reduced funding for housing in FY 88-89, we will give maintenance of the existing inventory priority over construction of new units. The proposed FY 89 Family Housing Budget will improve 2,223 existing units and eliminate or upgrade 255 substandard housing units. Only 778 new housing units will be added, leaving many of our families without adequate government housing. The reduction in the construction of new units increases the importance of the Variable Housing Allowance.

VARIABLE HOUSING ALLOWANCE (VHA)

VHA was designed to supplement soldiers' quarters allowances and help make adequate off post housing affordable. Funding levels for FY 88 were frozen at the FY 86 rate. Additionally the congressional ceiling on the VHA budget mandated that existing VHA rate tables be adjusted according to the results of the latest survey. Adjusting the rate without increasing the funding caused VHA dollar losses to 67 percent of eligible Army members. It is essential that future VHA rates keep pace with the rising cost of housing based on the consumer price index.

5. REAL PROPERTY CONSTRUCTION AND MAINTENANCE

If facilities are adequate, readiness benefits from the soldier's high morale and increased productivity. Conversely, dilapidated or unsuitable facilities foster poor attitudes and performance of duty.

The funding levels provided for FY 89 are not adequate to address our problems with facilities. In the next two years the Army will lose the headway made in improving facilities over the last six years. Army objectives are to satisfy fully recurring requirements for real property maintenance, prevent the growth of a maintenance backlog, and support Army initiatives in force modernization and force structure changes. Under current funding restrictions, these objectives cannot be met.

MILITARY CONSTRUCTION, ARMY (MCA)

The MCA program constitutes only two percent of the Army's total budget request. However, this program is one of the principal vehicles through which the Army improves the day-to-day effectiveness of our force.

The FY 89 request supports a military construction program to meet high priority stateside and overseas requirements. The overseas portion supports forward deployed forces. Stateside, major construction continues in New York to house a new light infantry division. Special Operations Forces have also received significant support in the budget. Particular attention has been paid to providing the proper proportion of facilities that support new equipment fielding, training, quality of life and working conditions, and community facilities.

Since 1982, the Army has shown its commitment to improving facilities by dedicating an increased proportion of its budget to military construction. The Congress initially responded favorably to these requests, and considerable progress was made in modernizing facilities, but budget constraints have resulted in a dramatic reduction in construction funding. Our goal has been to move all of our troops out of World War II era wooden buildings by 1990. We will no longer be able to meet this goal.

BACKLOG OF MAINTENANCE AND REPAIR (BMAR)

The Army's physical plant is extensive and aging. The job of maintaining this investment in satisfactory condition is difficult and expensive. The total replacement value of all Army facilities, excluding land, is more than $175 billion. The average age of the buildings is nearly 35 years, and military construction is not keeping pace with the need to replace older buildings. The continuing reliance on existing facilities, with piecemeal modifications as missions and force structure change, strains the entire infrastructure.

C. Sustainment

Sustainment is the ability to maintain the required level and duration of combat activity with forces and critical materiel to achieve national objectives. For the unified and specified commands, this translates into resources available from prepositioned war reserves, CONUS based assets, and the industrial base. The sustainability of our forces is often measured in terms of war reserve stocks, strategic lift capability, negotiated Host Nation Support Agreements, and other forms of allied support.

War reserve stocks provide equipment to the CINCs until the industrial base can provide the level of resources necessary to sustain the force. Although recent improvements have been made in war reserve stocks, modernization of these stocks with preferred munitions and weapons systems must continue. Currently, the industrial base can provide only one-fourth of the combat equipment requirements anticipated during the first six months of a major conflict. The ability to offset warfighting shortfalls with industrial base capability is an important part of our national deterrent.

1. SUPPORT TO UNIFIED AND SPECIFIED COMMANDERS

STRATEGIC MOBILITY

"Force does not exist for mobility but mobility for force." ***Alfred Thayer Mahan***

Adequate strategic airlift and sealift are critical to deterrence because they deliver Army forces where and when they are required to meet the threat. We continue to work with the Air Force and Navy in their efforts to improve the level and responsiveness of strategic airlift and sealift forces.

Strategic airlift is most crucial in the early days of a crisis. If fully funded through FY 94 this program will produce approximately 56 million of ton miles per day (MTM/D) of capability against a DOD goal of 66 MTM/D. The remaining shortfall would be significantly reduced by fielding the C-17 Airlifter. This aircraft will provide outsized airlift capability and reduce the intratheater airlift shortfall.

Strategic sealift is required for major force deployment and sustaining resupply. By FY 94, approximately half of our capability will be provided

An M-1 tank is loaded on a C-5A cargo aircraft.

Adequate sea lift is required for movement to distant locations.

by government owned ships, such as those in the Ready Reserve Force now managed by the Maritime Administration. Additional capacity would require the conversion of commercial container ships—a time consuming solution at best. The balance of usable shipping will be provided by the Military Sealift Command and merchant ships.

Deployment time for combat forces could be significantly reduced with adoption of the Surface Effect Fast Sealift Program. Surface effect ships capable of carrying approximately 5,000 short tons of unit equipment at 55 knots into virtually any port in the world could prove decisive when rapid projection of ground combat power is necessary. Army cargo offload programs are sized to meet the Navy's programed delivery capability. Other important programs include procurement of new landing craft, logistics support vessels, tug boats, and heavy lift amphibians.

As demonstrated by the new light infantry divisions, strategic mobility is considered in the evaluation of all new Army units and equipment. However, the continued decline in available breakbulk shipping dictates increased reliance on the commercial container ship fleet. On the West Coast, availability of ammunition container shipping is totally inadequate; the wartime result could be an ammunition shortfall in the Pacific and Southwest Asia.

Continued support for strategic mobility programs is essential if we are to meet our global deployment and sustainment commitments in a timely manner.

WAR RESERVE STOCKS

The Army establishes and maintains war reserve stocks in strategic locations worldwide to provide war-fighting CINCs an initial supply of ammunition, major end items, fuel, and secondary items until the supply line from the United States can be opened.

Our war reserve posture has steadily improved during the last several years, but our mixed fleet of new and old equipment requires additional war reserve stocks to sustain total force requirements. Funding constraints, coupled with changing force requirements, have prevented the Army from meeting its war reserve goals. Continued under funding will severely limit the ability of our CINCs to conduct sustained combat.

PREPOSITIONING OF MATERIEL CONFIGURED TO UNIT SETS (POMCUS)

POMCUS refers to organizational equipment stored in company and battalion sized packages for the rapid reinforcement of NATO by CONUS based forces. During REFORGER 87, 6,969 vehicles, enough to outfit an Army corps, were drawn from POMCUS.

More than 99 percent of POMCUS equipment drawn for last year's Reforger exercise was operational.

In FY 82 the United States expanded its commitment from four to six POMCUS division sets. The prepositioning of hospital equipment at sites where it will be used was initiated in FY 87, and the issue of Deployable Medical Systems begins in FY 88. All POMCUS sets have increased their level of stockage over the past fiscal year.

The POMCUS program is critical to our ability to project heavy forces rapidly in response to a crisis. Though expensive initially, POMCUS sites save resources and time in the long run by allowing stateside units to serve as short notice reinforcements for overseas commands. Continued congressional support of this strategic mobility program is essential to deterrence of war in Europe, and to the fulfillment of the U.S. commitment to provide Allied Command Europe with ten divisions within ten days of mobilization.

REICHEL LOGISTICS FACILITY

The Reichel Facility is a forward deployed logistical center for U.S. reinforcements to NATO. It allows us to support major units outside our traditional area of operations further to the south. Full development of Reichel will facilitate the wartime deployment of U.S. units against the most probable northern route of a Warsaw Pact attack. In peacetime, the Reichel Facility also serves as a community support base for 5,000 soldiers and family members. Present community facilities are inadequate and the programed funding for construction projects is required for this key location.

WARTIME HOST NATION SUPPORT

In return for U.S. commitments, the Federal Republic of Germany provides wartime host nation support to U.S. forces. Approximately 50,000 German military reservists plus civilian logistics support will be fully available by FY 93. The U.S. Army funds some equipment, expending 60 percent of dedicated funds on items of U.S. manufacture and 40 percent on German made items. The United States also bears annual civilian operation and maintenance costs. Germany funds military personnel costs and mobilizes much of the required equipment from its civil sector at an annual U.S. savings of $578 million.

Congress has adequately supported the U.S.-German agreement since 1983. Continued funding support is required through FY 94 to meet our commitment and to ensure that German units are ready to support USAREUR in time of war.

2. LOGISTICAL FACILITIES

Valuable supplies worldwide are still stored in wooden buildings of World War II vintage and other structures lacking modern fire prevention or suppression capabilities. Although corrective action is underway within existing resource limits, much of the Army's warfighting materiel is still stored in buildings that are inherently at risk. With congressional support we have made progress in solving this problem, but funds for additional required construction are not available at present budget levels.

LOGISTICS APPLICATION OF AUTOMATED MARKING AND READING SYMBOLS (LOGMARS)

LOGMARS makes it easier to inventory, ship, and account for supplies by using bar coding in many logistics systems. It enhances productivity significantly, with savings far exceeding the cost of implementation. While much of the LOGMARS infrastructure is now in place, funding of additional applications will produce even greater productivity rewards. When fully implemented, LOGMARS will be incorporated into nine logistics Standard Army Management Information Systems, significantly improving the Army's wartime ability to move units and material.

Bar coding is one method of improving the support to our forces.

SUPPLY PROGRAM

The Army's depot system maintains more than $36 billion of general supplies and ammunition in stock. This stock keeps the Army ready for war, supports peacetime OPTEMPO and, in the event of war, helps sustain combat operations.

The accuracy of this inventory affects decisions to buy and/or repair items. Reductions in funding for central supply operations several years in succession have forced depot commanders to divert people and resources away from physical inventory, quality control, and care of supplies in order to support day-to-day operations. The result is a 35 percent reduction in the number of lines inventoried annually since FY 85. This trend cannot be reversed at present funding levels.

DEPOT MAINTENANCE PROGRAM

Army depot maintenance is a $2.3 billion annual program consisting of:

☐ *Materiel maintenance* (approximately $1.8 billion in FY 89), which entails repair modification or conversion of existing materiel to increase combat effectiveness and reliability.

☐ *Maintenance support activities* (approximately $0.6 billion in FY 89), which provide new equipment training, publications, and technical assistance to the field.

Depot maintenance requirements continue to grow. As new and more sophisticated equipment is added to the inventory, an increasing number and variety of secondary items require overhaul. In FY 89, materiel maintenance is funded at 84 percent of requirements; maintenance support is funded at 62 percent. End item funding, now at 68 percent, only marginally supports readiness and sustainability. Continued underfunding will place the sustainment of our forces by depot maintenance at risk.

INDUSTRIAL BASE MANAGEMENT

The industrial base is that part of the total government and privately owned industrial production capacity which manufactures, maintains, modifies, overhauls, and repairs military materiel or will be made available for those purposes in wartime. Peacetime management of these assets determines our wartime sustainability levels.

INDUSTRIAL BASE: This program funds production capability to support peacetime procurement of materiel (tanks, ammunition, etc.) to improve readiness, wartime sustainment, and force expansion upon mobilization. A prime example is the FY 89 funding to begin the establishment of a surge production capability for additional Night Vision Devices. When additional resources become available they will be used to purchase forgings and castings for various caliber gun tubes and the components of the Multiple Launch Rocket System rocket. Failure to maintain an effective, responsive industrial base to meet sustainment and national security objectives undermines the credibility of our deterrent.

CONVENTIONAL AMMUNITION: CINCs continue to highlight shortages of ammunition stocks as a top warfighting concern. Their ability to accomplish missions assigned by the NCA is jeopardized by continuing shortages of modern ammunition stocks. Current funding precludes procurement of critically needed war reserves.

CLOTHING AND EQUIPPING THE TOTAL ARMY: Modernization of Organizational Clothing and Individual Equipment to support the Total Army is a continuous effort. New items entering the inventory will greatly improve the effectiveness and survivability of the individual soldier by lightening his load, improving his load carrying capability, and providing state-of-the-art, weather resistant, camouflage, and ballistic protective clothing.

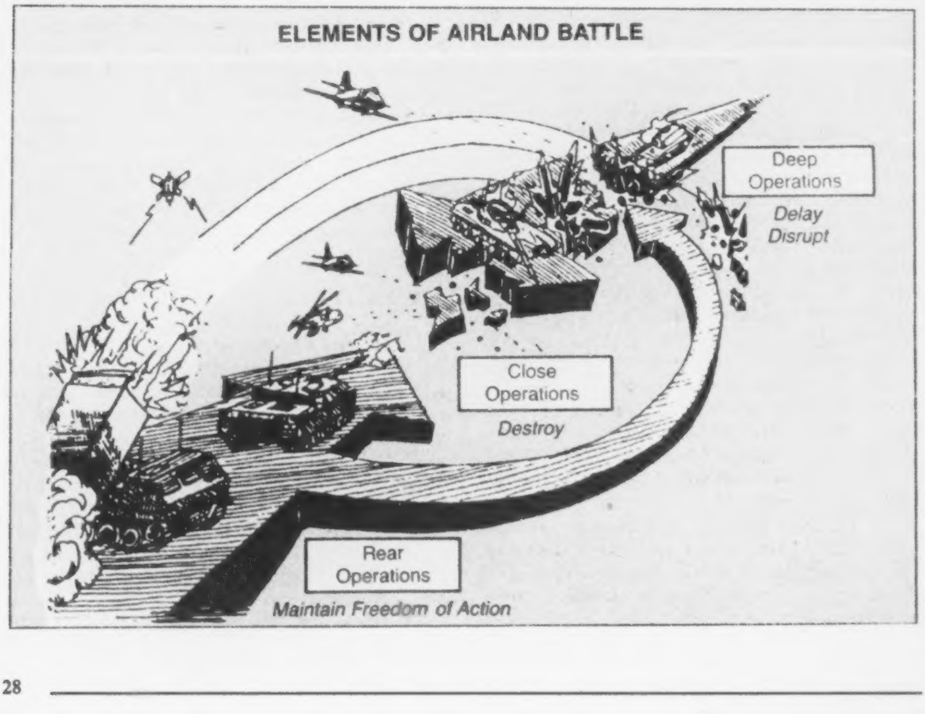
D. Modernization

"No government will be disposed to violate our rights if it knows that we have the means and are prepared and resolved to defend them."

James Monroe

Modernizing the Army's forces that must be prepared to fight to defend U.S. interests worldwide is a continuous process. ALB doctrine describes the Army's approach to generating and applying combat power at the operational and tactical levels of war in support of theater strategic objectives. Battlefield success requires securing and retaining the initiative to engage critical targets whose loss will degrade the coherence of enemy operations in depth, and to achieve victory most rapidly and economically. Army forces must attack deep, win the close-in fight and

ELEMENTS OF AIRLAND BATTLE



protect operations in the rear area. The Army's investment strategy is to continue modernization of equipment and systems for the interrelated close, deep, and rear operations, and continue to invest in research and development to exploit high leverage advanced technologies. Implicit in this strategy is the acquisition of appropriate command and control and sustainment capabilities. This approach will enable the United States to gain a qualitative edge and field a greatly enhanced conventional deterrent force.

One of the most visible changes in our Army this decade has been the fielding of modern equipment with its attendant improvement in our ability to execute our warfighting doctrine in accordance with the plans of the unified and specified commanders-in-chief. In the early 1980's, the Army was at a crossroads. While many modern systems were close to production, obsolete equipment and outright shortages jeopardized the credibility of our conventional deterrent. In 1983 the Army elected to hold the number of AC soldiers constant and give priority of support to our modernization needs.

Major systems fielded to our soldiers since then include: the M1 Abrams tank, Bradley Fighting Vehicle, AH-64 Apache attack helicopter, Hellfire missile, UH-60 Black Hawk helicopter, Multiple Launch Rocket System (MLRS), Patriot missile system, and Pershing II. The Army's dramatically improved ability to fight and capability to deter must be counted a major success.

As part of the modernization process, the MANPRINT program ensures that new systems are designed with human performance and reliability in mind. The materiel acquisition process is specifically affected in the areas of manpower, personnel, training, system safety, health hazard assessment, and human factors engineering. By considering human characteristics and limitations early in the design process, we strive to equip the soldier rather than merely man the equipment. The goal is maximum performance of soldiers with their new equipment at minimum cost.

MANPRINT analysis is influential in establishing requirements for contracts and source selection boards. MANPRINT uses human figuring modeling to refine mechanical designs, thereby considering human characteristics even before prototypes are fabricated. The result is an increase in effectiveness with a savings of time and money.

With modernization and planned product improvements of our combat systems well underway, the next area of dynamic improvement will be Command, Control and Communications. Modernized battlefield command and control systems will provide new capabilities in the transmission and processing of bulk data, as well as the integration of systems at many different levels. Enhancing deep attack capability, lightening the force, and developing true battlefield synchronization are other areas where major advances are anticipated shortly.

1. CURRENT MOMENTUM IN CLOSE OPERATIONS

Close operations at any echelon comprise the current activities of major committed combat elements, together with their immediate combat support and combat service support. At the operational level, close operations comprise the efforts of large tactical formations—corps and divisions—to win current battles. At the tactical level, close operations comprise the efforts of smaller tactical units to win current engagements.

At any echelon, close operations include the close, deep, and rear operations of subordinate elements. Thus the close operations of a corps includes the close, deep, and rear operations of its committed divisions or separate brigades. Activities are part of close operations if they have an immediate impact on the current fight. Among the activities typically comprising close operations are maneuver (including deep maneuver), close combat (including close air support), indirect fire support (including counterfire), combat support and combat service support of committed units, and command and control.

Basic to close operations is the application of direct combat power with short range weapons used by infantry and armored units. Close operations also rely heavily on the use of indirect fire support provided by conventional artillery. The following systems are providing improved combat power for our close operations.

ATTACK SYSTEMS

ABRAMS TANK: The M-1 Abrams tank is the cornerstone of Army modernization efforts. The tank is in its eighth year of production, and as of the end of 1987, 53 battalion sets have been fielded. The M1A1 is a preplanned upgrade from the basic M1 tank to incorporate improvements in survivability, target acquisition, fire control, and firepower. The M1 and M1A1 are distributed to AC and RC units in a fielding scheme which ensures that the Army's first-to-fight units will always have the most modern main battle tank available. Continued funding of ongoing research and development is essential to meet program milestones for both new production and fleet retrofit.

U.S. soldiers using the M-1 Abrams won the 1987 Canadian Army Trophy for highest scoring tank platoon among NATO competitors.

BRADLEY FIGHTING VEHICLE (BFV): With its TOW antitank missiles, 25mm cannon, 7.62mm machine gun, and high cross-country mobility, the Bradley has restored agility and initiative to our mechanized infantry on the battlefield. As of December 1987, 25 battalion size units, including four ARNG battalions, have received and fielded the BFV. The Army initiated the high survivability program in 1984 to enable the BFV to counter the threat from improved weapons on the battlefield. The BFV M2/M3A1 Block II modification program will provide improved armor protection, spall protection liners, and minor stowage modifications. The FY 89 budget provides for 581 improved vehicles.

Our Bradley Fighting Vehicle fleet benefits from a program of preplanned product improvements.

AH-64 APACHE: The Apache, our primary attack helicopter, entered the inventory in 1986. It is designed to fight worldwide, day or night, and survive. Its principal mission is the destruction of enemy armor with the Hellfire missile, but it is also equipped with a 30mm chain gun and Hydra 70 rockets which are lethal against a wide variety of targets. Over 300 Apaches (five battalions) have now been delivered to the Army, including the first battalion to deploy to West Germany.

HELLFIRE MISSILE: Designed as the main armament of the Apache helicopter, this missile is guided by a laser beam that can be projected from ground observers, other aircraft, or the firing Apache itself. This enables the Apache to launch its missiles with less exposure to return fire. In some situations, the missile can attack a target that the engaging aircraft does not even see. Hellfire is also being adapted for use on the Black Hawk helicopter, and a ground launched version is being studied.

M119 105mm HOWITZER: A Non-Developmental Item (NDI) adopted without extensive development costs, the M119 will provide more capable direct support artillery to the 82d Airborne, the 101st Air Assault, and our light infantry divisions. The new howitzer offers significantly longer range and improved reliability over the current M102 105mm howitzer.

ARMOR ANTI-ARMOR: The much publicized Soviet fielding of reactive armor on some of its tanks presents a serious threat to our forces in the field. The Army's Armor/Anti-Armor program expands the scope of on-going combined arms initiatives to meet this challenge. Tank, artillery, aviation, air defense, and infantry systems fielded or in development have been refined to reinforce each other under this program. The result is a tailored, multi-dimensional array of armor and anti-armor weapons which will effectively defeat the armored threat.

COUNTERMINE OPERATIONS

The Soviet's ability to conduct mine warfare poses a major threat to the Army's forces. U.S. countermine capability is not significantly better now than it was in World War II, but several key systems are ready for production or distribution to the field. These include the Battalion Countermine Set, Mine Clearing Line Charge and the AN/PSS-12 Hand Held Mine Detector. These systems will assist unit commanders, but are not adequate to restore our mobility on the battlefield by themselves.

Several other systems are planned and ready for development, but have not been fully funded. The centerpiece of planned mobility systems is the Counter Obstacle Vehicle/Combat Mobility Vehicle. Ultimately, effective detection and accurate location of enemy minefields will be provided by:

☐ the Minefield Reconnaissance and Detector System;

☐ the Remote Minefield Detection System; and

☐ the Airborne Minefield Detection and Reconnaissance System.

These systems promise to provide Army commanders with sorely needed capabilities to defeat the extensive and sophisticated Soviet mine warfare threat.

2. CURRENT MOMENTUM IN DEEP OPERATIONS

Deep operations comprise activities directed against enemy forces not in contact and are designed to influence the conditions under which future close operations will be conducted. While close operations ultimately determine victory or defeat, the successful conduct of deep operations will disrupt the enemy's command and control systems, and slow the tempo of enemy offensive operations. Successful execution of deep operations is essential to prevent successive echelons of enemy forces from overwhelming our units in close operations.

To fulfill the Army's deep operations requirements, we are developing a system of systems. Sensor, information, and command and control systems will be fused together and coupled with weapons systems to develop a more fully automated architecture capable of fighting successfully in deep operations.

The MLRS allows U.S. division and corps commanders to attack targets deep behind enemy lines.

ATTACK SYSTEMS

MULTIPLE LAUNCH ROCKET SYSTEM (MLRS): A free-flight, area fire artillery rocket system, MLRS, fills a void in conventional fire support. Its primary missions are counter-battery and suppression of enemy air defenses. MLRS supplements cannon artillery fires by delivering a large volume of munitions in a short time against critical, time sensitive targets. In the counter-battery role MLRS helps to neutralize the enemy's artillery. The FY 89 budget provides for the purchase of 44 systems, or more than four battery sets.

ARMY TACTICAL MISSILE SYSTEM (ATACMS): The Army urgently needs a long range weapon that can operate day or night in all weather, is air transportable, and can effectively engage high priority land targets at ranges beyond the capability of present cannons and rockets. ATACMS is an improved conventional ballistic missile system designed to fill this need. ATACMS will be transported and launched from the MLRS launcher, deceiving the enemy as to the precise capability of MLRS units. Each launcher will be capable of firing two missiles containing 1,000 bomblets each. Testing of ATACMS will start in FY 88 with the first flight test in April 1988. ATACMS is scheduled for fielding in the 1990's.

INTELLIGENCE—ELECTRONIC WARFARE

JOINT SURVEILLANCE AND TARGET ATTACK RADAR SYSTEM (JSTARS): To see more than 100 kilometers deep into the enemy's force array the Army and Air Force are developing the JSTARS. JSTARS is a battle management and target attack control system which will be able to detect, track, classify, and assist in attacking both moving and stationary targets beyond the forward line of troops. The Army is specifically developing the Ground Station Module (GSM) for JSTARS while the Air Force develops the Prime Mission Equipment (PME): the platform, radar, and data link. The PME and GSM are in Full Scale Engineering Development. GSM Low Rate Initial Production is scheduled to begin in mid FY 89. A European field demonstration with the GSM and PME is planned for 1990/1991.

ALL SOURCE ANALYSIS SYSTEM (ASAS): Tactical commanders require timely, accurate intelligence if they are to make full use of our modernized deep and close operations systems. The ASAS is being developed for initial deployment to Army corps and divisions in the early to mid-1990's. As the Army component of the Joint Tactical Fusion

Program, it will integrate information from a variety of sources to produce useful intelligence. ASAS hardware and software will draw from improved intelligence collectors such as JSTARS, Guardrail Common Sensor, and national assets for targeting and deep operations planning. The ASAS data base will be supported by the Digital Topographic Support System, Portable ASAS Work Station, Integrated Meteorological System, and the Quick Response Multicolor Printer.

SPECIAL OPERATIONS AVIATION (SOA)

The SOA program will modify 23 UH-60A and 17 CH-47D helicopters into MH-60K and MH-47E special operations helicopters. The modified aircraft will have more powerful engines, air-to-air refueling capability, precision navigation, worldwide communications equipment, and improved aircraft survivability. Additional improvements include a totally integrated cockpit to reduce pilot workload, and improved infiltration/exfiltration aids such as terrain following radar and forward looking infrared. Two flight simulators will also be developed and procured for this program.

Until the SOF aviation program can be adequately funded, our country's ability to transport SOF personnel and equipment during special operations will remain tenuous. Currently, the warfighting CINCs have only a limited capability to insert special forces behind enemy lines to provide all important "human intelligence." Our program is designed to address this need.

Special improvements planned for aircraft like this UH-60 will increase the effectiveness and flexibility of Army SOF.

3. CURRENT MOMENTUM IN REAR OPERATIONS

Rear operations comprise activities rearward of the elements in contact. Rear operations are planned and executed to assure freedom of maneuver and continuity of operations, including continuity of sustainment, and command and control. Rear operations may have little immediate impact on close operations, but are critical to subsequent operations. At the operational level, rear operations focus on preparing for the next phase of the campaign. At the tactical level, rear operations sustain the tempo of combat, assuring the commander the agility to take advantage of any opportunity without hesitation or delay.

Four activities in particular must be conducted as part of rear operations: assembly and movement of reserves; redeployment of fire support; maintenance and protection of sustainment efforts; and maintenance of command and control. Other rear operations include: establishment and maintenance of lines of communications; traffic regulation and control; medical and field services; refugee control; and maintenance of civil order. In addition, air defense systems must protect all elements including troop formations, depots, lines of communication, air bases, key command and control facilities, and other vital assets.

COMMAND AND CONTROL

With the fielding of modern combat systems well under way, supplying modern command and control equipment for these systems assumes special urgency. The Army Tactical Command and Control System (ATCCS) is an integrated program that ties the five battlefield functional areas (maneuver control, fire support, intelligence-electronic warfare, air defense, and combat service support) together through common hardware and software. The five integral parts of ATCCS are: the Maneuver Control System; Advanced Field Artillery Tactical Data System; All Source Analysis System; Forward Army Air Defense Command, Control and Intelligence; and Combat Service Support Computer System. Our goal is to distribute information to commanders and their staffs in near real time through system networking. Specific communications programs which will support ATCCS include:

MOBILE SUBSCRIBER EQUIPMENT (MSE) is a secure, automatic digital area communications system which provides mobile and stationary users at corps and division level with voice, data, and facsimile transmission. MSE replaces ponderous manpower intensive equipment at corps and below with multiple communications nodes that automatically by-pass and re-route communications around inoperative nodes. The system is interoperable with joint service communications systems, combat radios, commercial telephone systems and NATO communications networks.

SINGLE CHANNEL GROUND AND AIRBORNE RADIO SYSTEMS (SINCGARS) provide the Army a new generation of lightweight, securable VHF/FM combat net radios, capable of operating in voice and data modes in an electronic warfare environment. SINCGARS are more reliable and easier to maintain than past radios. With anti-jam and digital data capabilities not previously available, SINCGARS have been fielded on a limited basis to Korea where they are performing exceptionally well.

SOF COMMUNICATIONS add lightweight, manportable and extremely reliable communications equipment to SOF organizations that operate deep behind enemy lines. The ability to communicate long distances without detection is key to SOF operations across the full range of missions from unconventional warfare and foreign internal defense to strategic reconnaissance and direct action.

JOINT SERVICE COMMUNICATIONS SYSTEMS (TRI-TAC) is a joint Army-Air Force communication modernization effort to develop, buy, and field high speed digital transmission, switching, terminal and system control equipment for theater level tactical forces. These secure systems interface with MSE, other services, the Defense Communication System, and allied networks. By replacing 25-year-old switching and transmission systems, the new systems will speed the flow of personnel, logistical, and operational information between the fighting corps, theater headquarters, and the stateside sustaining base.

FORWARD AREA AIR DEFENSE SYSTEM (FAADS)

Given the improvements in threat helicopters and long range weapons, the modernization of our forward area air defense is essential. Ongoing Army programs are being combined with new technology to integrate weapons, sensors, and new command, control, and intelligence systems. Relying heavily on NDI equipment and preplanned product improvements, the FAADS provides total coverage in the division area.

THE LINE OF SIGHT-FORWARD-HEAVY is a NDI program that will be fielded with Army heavy divisions to suppress enemy helicopters and fixed wing aircraft. The Air Defense Anti-Tank System, selected after competitive candidate evaluation, will undergo a full operational test starting in July 1989.

THE NON-LINE OF SIGHT system will acquire and engage threat helicopters masked from line of sight weapons or at extended ranges. Test flights of the Fiber Optic Guided missile (FOG-M) have demonstrated the capability to destroy flying helicopters up to 10 kilometers from the firing unit. An initial operational evaluation of FOG-M will begin this year. The FY 89 program will complete testing and accelerate development of a long range day/night system.

PEDESTAL MOUNTED STINGER (PMS), the rearmost component of the FAADS, will be a lightweight, highly mobile, line-of-sight surface to air missile-gun system operated by a two-man crew. It improves the reaction time and firepower of the Stinger and will be used for defense against fixed-wing aircraft and helicopters at low altitudes, in both day and night operations, primarily in the division rear area. Selection and procurement of Boeing's Avenger were based on a competitive test in FY 87. The first unit equipped for PMS will be fielded in FY 89.

FORWARD AREA AIR DEFENSE COMMAND, CONTROL AND INTELLIGENCE is an integral part of FAADS and incorporates a family of sensors (ground, aerial, active and passive) with an automatic data processing and distribution capability. A test for the ground sensor selection will be conducted this year.

STINGER REPROGRAMABLE MICROPROCESSOR (RMP): Stinger is an infrared homing missile system which provides air defense coverage to company-size combat units. Deliveries of Stinger and Stinger-Passive Optical Seeker Technique, which improves performance against infrared countermeasures, were completed in 1987. A RMP now available will allow the seeker to be reprogramed against countermeasures as they are identified. The first RMP missiles will be deployed this year. Future applications include both the PMS and the air to air launcher scheduled for selected helicopters.

THEATER AIR DEFENSE

PATRIOT: With its fast reaction time, high firepower, and ability to operate in a severe electronic countermeasure environment, the Patriot is the centerpiece of theater air defense. Seven Patriot battalions are currently operational with three additional battalions scheduled to join our forces during the next two years. The Federal Republic of Germany and the Netherlands are participating in Patriot acquisition programs to provide for cooperative air defense improvements. The first NATO unit was delivered in 1986, and discussions continue with other interested NATO allies. An aggressive product improvement program will maintain Patriot's effectiveness well into the future.

CHEMICAL WARFARE, DEFENSE, SMOKE, AND OBSCURATION

Threat analysis continues to document an increasing bio-chemical warfare threat around the world at all levels of conflict. The number of nations possessing chemical weapons has more than doubled this decade. Evidence exists of recent use in regional conflicts, to include between Persian Gulf states. Emerging biotechnology promises further proliferation, posing an ominous situation for U.S. forces worldwide. A strong defensive capability and adequate retaliatory assets are essential to deter any adversary's first-use of chemical weapons.

A strong defensive capability will enable our soldiers to survive and continue the fight. Progress has been made in improving our defensive posture with the recent fielding of new nerve and blood agent antidotes, and a nerve agent pre-treatment. In FY 89 the Army will continue to procure the Chemical Agent Monitor, the Lightweight Decontamination System, Simplified Collective Protection Shelters, improved Decontamination Kits, and the M40 Protective Mask. However, significant gaps in our defense remain. The most urgent need is for modern nuclear, biological, and chemical reconnaissance vehicles and standoff detectors so maneuvering units can detect and avoid battlefield contamination. Even with the best defensive measures, an enemy can force us to bear the burden of casualties and of operating in protective equipment unless we have a credible offensive retaliatory capability. This void is now being filled by the new binary munitions which the Army began assembling this year. Continued funding of this program will allow us to rid the nation of its badly outdated unitary stockpile while restoring a meaningful chemical warfare deterrent.

CHEMICAL DEMILITARIZATION

The 1986 DOD Authorization Act requires destruction of the unitary chemical stockpile, in combination with binary modernization, by 1994. The Army has planned for destruction as expeditiously and as safely as possible. The Final Programatic Environmental Impact Statement has identified on-site disposal at the eight CONUS sites which store the chemical stockpile as the Army's preferred alternative. The official Record of Decision, which supports on-site disposal, was announced by the Under Secretary of the Army in February 1988. At congressional request, the Army is now assessing alternative technologies and schedules; the additional studies may set the disposal completion date back two to three years. The overall scope of the program will be outlined in a formal Report to Congress. This report will include record of decision, recommended disposal technology, time lines to completion, and funding requirements.

Modern warfare requires a modern system of petroleum delivery.

BULK PETROLEUM DISTRIBUTION

The Army is responsible for overland distribution of bulk petroleum to all services; without an adequate fuel distribution system, we cannot sustain our forces in combat. Petroleum is transferred inland from offshore and pier-side tankers through a network of tactical storage and pipeline systems, and finally to the retail distribution system and user. A non-developmental modernization effort culminated in 1987 with the production prove-out of the Inland Petroleum Distribution System. However, complete fielding awaits additional funding.

TACTICAL WATER SUPPORT

Success on the battlefield is impossible without an adequate supply of water for the individual soldier and his equipment. Since 1981, the Army's Tactical Water Program has developed assets and techniques for water detection, production, treatment, storage, distribution, and cooling. In FY 89 the program will buy 3,000 gallon reverse osmosis water purification units. Future funds will procure additional water purification units for non-divisional and general support units, semi-trailer mounted fabric tanks, additional ground mounted collapsible tanks, and water quality analysis units.

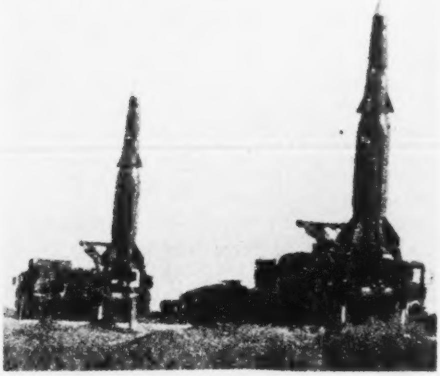
4. AVIATION MODERNIZATION

As an element of the combined arms team, aviation units provide an inherent versatility to perform a wide variety of combat, combat support, and combat service support functions, and to increase the tempo of operations across the range of potential conflicts. The current Army aviation fleet of more than 8,000 rotary wing aircraft must be modernized to keep pace with the requirements of the future battlefield.

In recognition of the need to modernize this fleet, the Army has developed an affordable strategy which retires aging aircraft, continues production of current aircraft, and protects its investment for the future. Over the next 15 years, the Army Aviation Modernization Plan (AAMP) will provide approximately 200 aircraft per year through production and/or modification programs for the AH-64, UH-60, OH-58D, and CH-47 helicopters. Additionally, the plan refocuses the light helicopter program with an anticipated fielding in the mid-1990's, and continues special operations aircraft development. AAMP will retire about 2,000 aging UH-1 and OH-58 aircraft by FY 94.

The RC constitutes a major portion of the Army aviation force, spanning the full spectrum of aviation missions. The AAMP supports modernization of the RC at an increased rate over previous projections. Fielding will be based on mission priorities and roundout affiliation.

This modernization program will provide the warfighting CINCs near-term day/night reconnaissance aircraft, fully resourced and modernized assault and lift units, and modernized attack units. In the long term, the AAMP will produce a fully modernized total Army aviation fleet.



Pershing II's deployed on their launchers.

5. RC MODERNIZATION ISSUES

DEDICATED PROCUREMENT PROGRAM (DPP)

DPP funding is appropriated specifically for the RC to improve near term readiness of selected items of equipment within high priority early deploying units. DPPs have allowed the ARNG to procure major combat and support equipment such as M901 Improved TOW Vehicle conversion kits, M113A3 Armored Personnel Carriers, M198 Howitzers, UH-60 Helicopters, AN/PVS-5 Night Vision Goggles, AN/VRC-46 Radio Sets, and Chaparral Missile systems. The USAR has concentrated on procuring trucks of all body types, semi-trailers and communications-electronics test and diagnostic equipment, as well as M113 family of personnel carriers and medium armored recovery vehicles.

DEPLOYABLE MEDICAL SYSTEMS (DEPMEDS)

DEPMEDS is a DOD effort to standardize medical facilities and to eliminate health care equipment shortfalls required for deployable hospitals. There are seven types of DEPMEDS equipped Army hospitals, ranging from mobile Army surgical hospitals deployed far forward to general hospitals farther to the rear. Each type represents a different configuration of standard modules, such as operating rooms, laboratories, x-ray units, and wards. The Army RC is scheduled to receive 119 DEPMEDS sets beginning this year.

ADDITIONAL MAJOR USAR INITIATIVES

By FY 90, distribution of the following systems to the USAR will be complete:

☐ M60A3 Main Battle Tank with thermal sight, laser rangefinder, and an analog ballistic computer;

☐ a new 1 1/4-ton tactical wheeled vehicle;

☐ M939 Series 5-ton trucks in both general and special varieties.

6. MODERNIZATION OF NON-STRATEGIC NUCLEAR FORCES (NSNF)

U.S. Army nuclear systems include Pershing II, Lance, Artillery-Fired Atomic Projectiles (AFAPs), and Atomic Demolition Munitions. Pershing II, with a range of 1,800 kilometers, is the only Army system covered by the INF agreement. Pershing II is significant in that it is the only Army system capable of reaching the Soviet mainland. It is scheduled for retirement from the Army force structure during implementation of the INF agreement.

Pershing 1A, Lance, AFAPs, Nike-Hercules, and Honest John support our allies but the warheads are maintained under U.S. control by Programs of Cooperation (POCs). The Federal Republic of Germany, Belgium, Italy, Netherlands, United Kingdom, Turkey and Greece participate in POCs. West Germany's Pershing 1A POC will be terminated during the last two months of the INF implementation period.

Modernization of AFAPs and fielding of a Follow-On To Lance missile system are long standing high priorities for NATO. Specifically addressed in the 1983 Montebello Decision, and reaffirmed by NATO's Nuclear Planning Group in November of 1987, these programs are a NATO goal. Modernization of NSNF is required to maintain the credibility of the NATO triad of forces called for by NATO strategy, especially in light of the INF agreement.

Modernized AFAPs offer tremendous advantages in range, response time, target effect, accuracy, safety protection, and firepower;

☐ Redesign of the division support command to provide quicker repair and resupply through a forward support battalion in each brigade and a main support battalion at the division rear area; and

☐ Reinforcement of corps artillery with 8-inch howitzer and MLRS battalions, and the addition of a battery of MLRS as the general support weapon for division artillery. These changes increase both the range and power of deep attack assets.

In accordance with their increasing importance, RC roundout units are converting to these new, more powerful designs at about the same time as their associated AC unit.

2. IMPROVEMENTS IN LIGHT FORCES

Ten years ago our ability to supply distant commands quickly with combat units was extremely limited. Those units available were equipped with heavy weapons systems, and burdened with complicated logistical organizations. Powerful on the ground, they were difficult to deploy rapidly in an unanticipated crisis. To fill this strategic void, the Army developed the light infantry division.

Today, the Army continues to fill its five light infantry divisions consisting of about 10,800 soldiers each (nine light infantry battalions, three 105mm towed howitzer battalions and one 155mm towed howitzer battery). To maintain a high density of combat personnel under a constrained AC strength, two of the divisions now include roundout brigades from the RC. Elements of the specialized airborne and air assault divisions have completed their adaptation to a lighter design, modified to consider unique mission and specialized training requirements. As a

E. Force Structure

"Superior force is a powerful persuader."
Winston Churchill

The process of establishing our force structure is initiated when the unified and specified commanders-in-chief submit unconstrained combat force requirements based on their war plans. Within budget constraints and at a level of acceptable risk, and based on priorities established by the President, the Secretary of Defense, and the JCS, the Army establishes the current force structure requirements (the number and configuration of combat, combat support, and combat service support units). Both the JCS and the Army are reviewing this process to ensure that our forces are properly tailored. The heavy and light units provided to the CINCs, as well as their logistical support, have recently undergone significant improvement.

1. IMPROVEMENTS IN HEAVY FORCES

A standard armored division now consists of about 16,800 soldiers (6 tank and 4 mechanized infantry battalions) and a mechanized infantry division of approximately 17,100 (5 tank and 5 mechanized infantry battalions). Recent improvements in these heavy forces include:

☐ Fielding of the Abrams tank, BFV, and Apache attack helicopter with increased speed, result we can now project a formidable combat force anywhere in the world within a matter of days.

3. IMPROVEMENTS IN SOF

In FY 89 all Ranger, Special Forces, and AC PSYOP units will convert to new organizational designs. The redesign improves operational capabilities, complements the Army of Excellence initiatives in the heavy and light forces, and takes full advantage of on-going modernization efforts.

The activation of one special operations aviation battalion, two chemical reconnaissance detachments, and the addition of liaison teams to the special operations communication battalion further enhance the Army's SOF. Aerial infiltration, exfiltration and resupply will be improved along with the capability to detect chemical agents. The liaison teams provide added communication links between appropriate command and control elements and deployed SOF.

RC units continue to provide 50 percent of the Special Forces, 33 percent of special operations aviation, and more than 90 percent of the PSYOP and civil affairs units.

4. IMPROVEMENTS IN LOGISTICAL SUPPORT

Logistical Unit Productivity Systems (LUPS) studies focus on enhancing productivity and eliminating redundant positions and equipment in transportation, ordnance and supply and service force structures of the AC and RC. As a result of LUPS analysis, many combat service support units are increasing their capabilities dramatically by converting from older manpower intensive organizations to modern equipment intensive designs. Examples of force structure changes which have increased productivity include:

☐ The addition of 6,000 lb. variable reach fork lifts to ammunition companies to speed the loading and unloading of containers.

☐ The replacement of 5,000 gallon petroleum tankers with 7,500 gallon tankers, increasing the hauling capability by 50 percent without requiring additional drivers.

☐ The addition of pumps, filter separators, and collapsible fuel containers to petroleum supply companies to double the daily capacity.

The cumulative effect of such changes is to improve training and readiness while releasing manpower to the new heavy and light combat units.

5. DOD REORGANIZATION

The reorganization of DOD has further streamlined DA staff operations. The DOD Reorganization Act of 1986 affects the Army most directly through Titles IV, V, and VI.

TITLE IV

Army initiatives to implement joint education and personnel assignment policies include:

☐ Increasing the number of National Defense University graduates assigned to joint duty assignments;

☐ Providing a joint professional military education track at the Command and General Staff College and Army War College;

☐ Including joint duty considerations in instructions to promotion boards and school selection boards; and

☐ Conducting selection boards for recommendation of officers for joint specialty designation.

The Army continues to work toward full implementation of both the letter and the intent of the law. In order to carry out the intent of Congress and properly develop leaders, the following modifications are needed:

☐ Reduction of tour length to three years for field grade and two years for general officers.

☐ Extension of the transition period of joint specialty officers (and nominees) to October 1989.

☐ Allowing full credit for joint duty tours served prior to enactment of the law.

☐ Allowing full credit for joint duty tours which are only two or three years due to geographic locations or the nature of the duties.

☐ Allowing joint credit for those few in-service positions that deal in joint matters.

TITLES V and VI

The Army Secretariat now has responsibility for acquisition, research and development, auditing, comptroller functions (including financial management), information management, Inspector General duties, legislative affairs, and public affairs within the Army. The number of military and civilian employees on permanent duty in the Office of the Secretary of the Army and on the Army Staff will be limited to 3,105, effective October 1, 1988. The new organization is working and personnel reductions are on schedule. Actions are also well underway to effect the reductions in Army military management headquarters mandated under Title VI.

"We must protect peace and deter war by making sure the next president inherits...a national security that is unassailable and a national defense that takes full advantage of new technology and is fully funded."
Ronald Reagan
State-of-the-Union Address, 1988

IV. ACCOMPLISHING TOMORROW'S MISSION—Shaping the Future

A military establishment which defends only against today's threat is an invitation to obsolescence. Our Army must anticipate the threat and design a defense long before that threat appears on the battlefield. Only by shaping the battlefield of the future and developing programs to win on that battlefield can we accomplish our goal: continued peace through continued deterrence.

A. The Army's Continuing Strategic Role

Our National Security Strategy is based on several fundamental considerations which will remain relatively constant in the future. These include:

☐ the basic differences between our national values of human dignity, personal freedom, and individual rights, and those of our potential adversaries;

☐ the fact that to protect and nurture our values the United States must maintain its role as a global power, protect its interests, and discharge its responsibilities around the world;

☐ the likelihood that U.S. interests will continue to be threatened by hostile forces in an effort to weaken our influence and undermine our alliances;

☐ the continued reliance of the United States on an array of diplomatic, informational, economic and military instruments to counter those threats;

☐ the focus of U.S. defense policy on deterrence, founded on a tailored mix of strategic and non-strategic nuclear forces and robust conventional forces.

Army doctrine, plans, and programs are driven by these considerations.

Whatever challenges the future may hold, freedom under the Constitution will continue to be our most important national security objective. The greatest conventional military threat to freedom continues to be land based forces. Consequently, our Nation will continue to require ground combat forces to deter war in the future.

Of course, changes to Army responsibilities in conjunction with this strategic role are quite possible. JCS guidance to the Army may well expand to include new tasks. Whatever the parameters of the Army's future role might be, the key to its accomplishment will be fielding a flexible, quality force with an appropriate mix of AC units for immediate contingencies and RC units for extended combat. The Army will continue to have major elements forward deployed where their visible presence is necessary to deter aggression, and forces based in the United States that are rapidly deployable to reinforce, to respond to contingencies, and to act rapidly to defuse potential crises early and decisively as part of a joint or combined task force.

B. AirLand Battle for the Future

In keeping with anticipated strategic trends, Army doctrine for the future envisions a continued requirement for a tailored ground force of heavy and light units to fight and win against a wide range of threats. The imperatives of battle, the need to shoot, move, communicate, and provide support, do not change. Consequently, the fundamentals of our doctrine—disrupting the enemy deep and destroying him in close combat while protecting our own rear operations—will remain valid for the foreseeable future.

As the Army defines and refines its concepts, doctrine, and materiel requirements for the years ahead, we will anticipate the technology and hardware most likely to satisfy the Army's needs. In defining the capabilities required to accomplish our missions, we also identify the technological barriers to be overcome. This "technology pull" helps focus research and development efforts. Research associated with the Army's aviation modernization program provides a good example of doctrine driven technological efforts.

However, emerging technologies and capabilities can also affect our ability to apply combat power on the battlefield. Examples of scientific advances which may provide a "technological push" to Army research and doctrine include:

☐ Developments in pulse power and electromagnetic guns and an associated increase in lethality could change the nature of our armored force;

☐ Breakthroughs in electromagnetic armor and electric arc discharge which could make our vehicles impervious to today's most powerful mines and tank killing weapons;

☐ Advances in artificial intelligence, including expert systems, might provide a powerful new approach to automating such battlefield functions as situation assessment reconnaissance, target recognition and battlefield planning;

☐ Improvements in microprocessors, sensors and communications systems which could revolutionize the commander's ability to see and affect the battle.

An electronic warfare specialist aligns an antenna.

Because of the rapid and sometimes unexpected nature of technological advances, Army doctrine and "next generation" systems are under continuous review. In this way, the Army actively shapes the future in which it will operate.

C. Plans for the Future

In concert with anticipated strategy and doctrine, the Army actively shapes its evolution by ensuring that the budget requests submitted to Congress identify proper priorities and programs. Elements of Army planning include:

☐ The *Army Long-Range Planning Guidance* (ALRPG) is the Army's broad direction for the future. It is focused 10 to 20 years out and guides the Army into the 21st century through analysis of basic trends and influencing factors that are expected to be important to the Army or the environment in which the Army must operate. Based on this analysis, HQDA and MACOMs work to create the capabilities and characteristics the Army of the future will need. The ALRPG is evolutionary in outlook; it provides for technological innovation and breakthroughs where possible, but is closely linked to today's equipment and capabilities.

☐ *AirLand Battle Future*, now being developed as the Army's umbrella warfighting concept for the year 2004, will guide future modernization providing the basis for evolutionary change to Army doctrine training, structure, materiel, and leader development. First products will be: the warfighting concept for heavy forces in mid- to high-intensity conflict; attendant force design; and materiel transition strategy. The force design will provide a basis for Total Army Analysis 96; the materiel transition strategy will be a major building block for the Program Objective Memorandum for FY 92-96.

☐ The *Long Range Research, Development and Acquisition Plan (LARRDAP)* identifies technologies being developed to improve the effectiveness of the Army, translating the goals and objectives of The Army Plan into specific research and

development programs. The LARRDAP is used to establish priorities, provide guidance to HQDA and MACOMs. The LARRDAP provides an integrated framework to continue the Army's modernization process.

☐ The *Army Plan* communicates leadership policy and resource guidance early in the biennial PPBES cycle to ensure that the Total Army is properly structured, trained, modernized, manned with quality personnel, and designed to support the unified and specified commanders-in-chief. As the key link between the planning and programing processes, it provides specific force and resource allocation guidance in the mid-range years (FY 90-94) and general guidance for the extended planning years (FY 95-04). Together with the Program Objective Memorandum and the Budget, The Army Plan documents the actual allocation of resources and demonstrates how the Army plans to execute the programs necessary to meet its responsibilities required by the National Military Strategy.

D. Programs for the Future

The Army creates specific *programs* to meet the requirements identified by the *strategy*, *doctrine*, and *plans* for the future. Future equipment programs offer three ways to meet those requirements by:

☐ product improving current equipment as long as feasible;

☐ procuring off-the-shelf equipment; and

☐ developing and acquiring specific equipment designed to fulfill future requirements.

Our programs are carefully managed to shape the future through the most prudent combination of these acquisition approaches. For the long term, a vigorous, threat oriented research and development program is our most important corporate investment. By capitalizing on emerging technologies we best pursue the qualitative edge on the battlefield, and avoid technological surprise and premature obsolescence of our systems. Pre-planned product improvements, like those for the Abrams tank and BFV, are now anticipated from the outset. This approach will keep recently fielded systems effective into the next century.

Only by using our technology base to its fullest potential to develop systems and field hardware as quickly and economically as possible can we strengthen deterrence, reduce reliance on nuclear weapons, and lower the risk of war. To shape the future and deter our adversaries we must support a continuous modernization program.

Laser designator: indicator of the future.

1. RESEARCH & DEVELOPMENT

Identifying and exploiting the technologies which will provide our soldiers with the greatest possible technological advantage on the battlefield of the future is a high priority. Research and development of these technologies may lead to entirely new battlefield concepts that will affect all aspects of the Army, to include doctrine, training, force design, and weapon systems development. Examples of these "critical technologies" currently receiving attention from the Army include:

☐ Automated sensors and sensor fusion;

☐ Directed energy weapons;

☐ Integrated active and passive survivability;

☐ Microelectronics and integrated circuits;

☐ Propulsion and conventional warheads; and

☐ Robotics and machine intelligence.

Technologies are evaluated using advanced development demonstration programs which serve as an indispensable bridge between the promise of research and the reality of full scale system development. Two of the many ongoing demonstrations are:

☐ the Aided Target Recognition/Multisensor Fusion demonstration which will evaluate the ability of state-of-the-art sensors to aid a weapon system's crew in recognizing targets and minimizing false alarms;

☐ the Propulsion 21 demonstration which will investigate promising propulsion system improvements that might double the capability of current systems.

STRATEGIC DEFENSE COMMAND (SDC)

In one of our most important efforts, the Army's SDC helps shape the future by playing a key role in the development of the Strategic Defense Initiative. Of course, the "technological spin-off" from advancements in these areas has the potential to revolutionize our tactical capabilities as well. SDC work has been concentrated in five key areas.

☐ In *Surveillance, Acquisition, Tracking, and Kill Assessment*, SDC is developing airborne and ground based sensors to provide early warning, tracking and identification of incoming enemy missiles.

☐ In *Directed Energy Weapons*, SDC is exploring the use of some lasers and beam devices, such as the Neutral Particle Beam, to distinguish enemy warheads from decoys and debris, and others, like the Ground Based Free Electron Laser, to attack targets.

Fielded in 1970, the anticipated life of the Lance system was 15 years.

☐ In *Kinetic Energy Weapons*, SDC has demonstrated the capability to acquire, track, and intercept high speed targets. The upcoming test flights of the High Endoatmospheric Interceptor and Exoatmospheric Reentry-Vehicle Interceptor System will validate detection, tracking, and homing mechanisms for destruction of reentry vehicles at high altitudes, both inside and outside the atmosphere.

☐ In *Systems Analysis/Battle Management*, SDC's long range goal is to provide control of the highly complex, multi-layered defense system. SDC is now focusing on mid-course and terminal phases of hostile missile flight, and is working on both continental and theater defense modes.

☐ In *Survivability, Lethality, and Key Technologies*, SDC is investigating technology for enhancing survivability, reducing uncertainties of lethality and vulnerability, evaluating Soviet countermeasures, and developing materials and technologies to support system concepts.

2. FOLLOW-ON PROGRAMS

FOLLOW-ON TO LANCE (FOTL)

FOTL is required as a replacement for the aging Lance Missile System which is the centerpiece of the NATO non-strategic nuclear triad. Coupled with an existing manpower efficient launcher, FOTL will provide significant force structure and system cost savings. An adjustment to the FY 89 budget has provided $15 million to support initial studies and analysis for program development.

LIGHT HELICOPTER (LHX)

The LHX will modernize Army aviation units with advanced technology aircraft designed to fight and survive in the mid- to high-intensity battlefield of the 1990's and beyond. The current production fleet of OH-58Ds and AH-64s began the modernization required for success on the future battlefield by providing a night and adverse weather capability. Modernization efforts will continue with the LHX replacing the light fleet of AH-1 attack, and OH-58 and OH-6 reconnaissance aircraft. The improvements in automation, battlefield sensors, target acquisition, and reliability/maintainability will be integrated into the LHX to provide leap ahead operational effectiveness for the light attack/scout fleet.

In 1985 the Army initiated the Advanced Rotocraft Technology Integration program to reduce the technical risk for LHX development. This program, along with other research and development initiatives, provided sufficient advances in forward looking infrared, very high speed integrated circuit design, target recognition, and composite construction techniques to enable the LHX program to enter the demonstration and validation phase of development this year. The FY 89 funding request includes $55.9 million earmarked to continue Full Scale Development of the highly successful T800 turbine engine program, leading to qualification and initial production contract award in 1990.

3. THE ARMY IN SPACE

The Army continues its active participation in space-related activities. The Army is the lead service in the extremely successful Tactical Exploitation of National Capabilities program which provides national level space systems support to battlefield commanders. The U.S. Army Space Agency in Colorado Springs, the Army component of the U.S. Space Command, is the Army's operational arm for planning for DOD space system support to land forces and strategic defense. The Army Space Institute at Fort Leavenworth, Kansas, is tasked to develop the Army Space Architecture which includes doctrine, training, organization, and materiel requirements for space based support to land combat forces.

To date, our efforts in space have been focused on communications, intelligence, navigation, geodetics, and mapping. Space systems have become indispensable for strategic operations, and efforts are underway to expand their use in support of ground force commanders.

The Army has developed an aggressive five year program of space technology demonstrations to illustrate applications of existing space based systems and generate ideas for future space system requirements. The demonstrations will include applications of weather/terrain monitoring systems and the Global Positioning System. Additional initiatives will evaluate the utility of military man-in-space programs using the space shuttle. The Army Technology Base program supports these demonstrations and research programs by focusing attention and funding in new directions. The future of our ground combat deterrent depends on continued support of these promising initiatives.

"God grants liberty only to those who love it, and are always ready to guard and defend it."
Daniel Webster

V. RESOURCES FOR THE MISSION

A. Necessary FY 88 Budget Adjustments

The FY 88 Appropriation and the FY 89 Budget mean very austere times for the U.S. Army. The successful execution of the current fiscal year's budget will require both the skillful management by the Army and the cooperation of Congress.

Our ability to maintain readiness has been sharply constrained by absorbing a number of costs—pay raises, health costs, CHAMPUS, foreign currency fluctuations, and fuel price increases. This would have resulted in a FY 88 ground OPTEMPO below a minimally acceptable level. The Army has chosen to operate at a ground OPTEMPO of 725 miles and an air OPTEMPO of 14.5 hours, which we consider to be our minimum for essential training readiness. It is our intention to continue to support the minimum essential training levels for the remainder of the fiscal year, but we need the assistance of Congress.

We are in need of supplemental legislation for FY 88 which will provide: "That no later than the end of the second fiscal year following the fiscal year appropriations made to the Department of Defense have expired for obligation, unobligated balances of such appropriations may be transferred into the appropriation "Foreign Currency Fluctuations, Defense" to be merged with and be available for the same time period and the same purposes as the appropriation to which transferred."

This supplemental legislation would permit us to utilize FY 84 expiring procurement funds to finance the difference between the budgeted and the actual rate of foreign currency expenditures. This does not require an increase in FY 88 budget authority. Without this assistance, we may be forced to reduce our training readiness in the 4th Quarter and take additional drastic reductions in other Operation and Maintenance, Army programs, most noticeably in the funds which operate our installations and logistical base. These reductions could include civilian work force management actions such as hiring freezes, release of temporaries, furloughs and early retirements.

B. FY 89 Budget Overview

The FY 89 budget will continue essential improvements in readiness, support a flexible and responsive force structure, and provide limited improvements in the sustainability of forces. However, budget constraints have, for the third consecutive year, reduced the amounts of modernized equipment budgeted. Consequently, the budget request is insufficient to provide a modernized force which can ensure a qualitative conventional superiority over the Soviet Union. Funding for war reserves, although increasing, remains inadequate to meet changing force requirements.

The FY 89 Budget requests Total Obligation Authority of $78 billion. Outlays are projected to be $76.7 billion. The FY 89 request in constant FY 89 dollars represents a $1.3 billion decrease when compared with FY 88 ($79.3B).

The cost of supporting the Army falls into three major categories:

☐ Operations and Maintenance (O&M), which includes the Active, Reserve, and National Guard O&M, plus Family Housing Operations appropriations;

☐ Military Personnel, which includes Active, Reserve, and National Guard military personnel appropriations; and

☐ Investment, which includes procurement, research, development, test and evaluation, construction, and stock fund appropriations.

Operations and maintenance accounts contain $26 billion in FY 89. Funding for operations and maintenance accounts has grown from 30 percent of the budget in FY 86 to 33 percent in FY 89. This is a result of the increasing operational support costs associated with modernizing and maintaining the Army and a reduction in investment dollars.

The military personnel category contains $30 billion in FY 89. The personnel accounts have increased from 36 percent in FY 86 to 38 percent in FY 89.

The investment accounts contain $22 billion in FY 89. This represents 28 percent of the budget, a decline from 33 percent in FY 86.

C. Positive Aspects of the Budget

☐ Provides for AC ground OPTEMPO of 850 miles and RC ground OPTEMPO of 225 miles.

☐ Provides for AC air OPTEMPO of 15.8 hours and RC air OPTEMPO of 7.4 hours.

The FY 89 Budget provides for the equivalent of 10 battalions of M1 tanks.

Deep attack assets will be bolstered by 44 additional MLRS in FY 89.

☐ Provides funding for the Combat Maneuver Training Center in Europe.

☐ Supports the most essential warfighting requirements of the unified and specified commanders-in-chief.

☐ Continues the conversion of heavy forces to modern organization designs.

☐ Continues most quality of life programs.

☐ Continues the Forward Area Air Defense program.

☐ Continues SOF modernization at reduced rates.

☐ Improves integrated circuits technology for automatic target recognition and battlefield information and management.

☐ Increases development of advanced missile and infrared technology.

☐ Continues the development of improved armor and anti-armor weapons.

☐ Restructures the Light Helicopter (LHX) program with a major effort being the demonstration of Mission Equipment Package Technology.

☐ Continues a stable RC Paid Drill Strength.

☐ Promotes efficiency through increased automation.

☐ Improves security against terrorist activity.

D. Negative Aspects of the Budget

Fiscal constraints have produced a FY 89 Budget request which:

☐ Funds only 50 percent of required depot maintenance for major end items of equipment.

☐ Slows the planned increases in wartime sustainability.

☐ Allows the Backlog of Maintenance and Repair (BMAR) on facilities and housing to rise above an acceptable level.

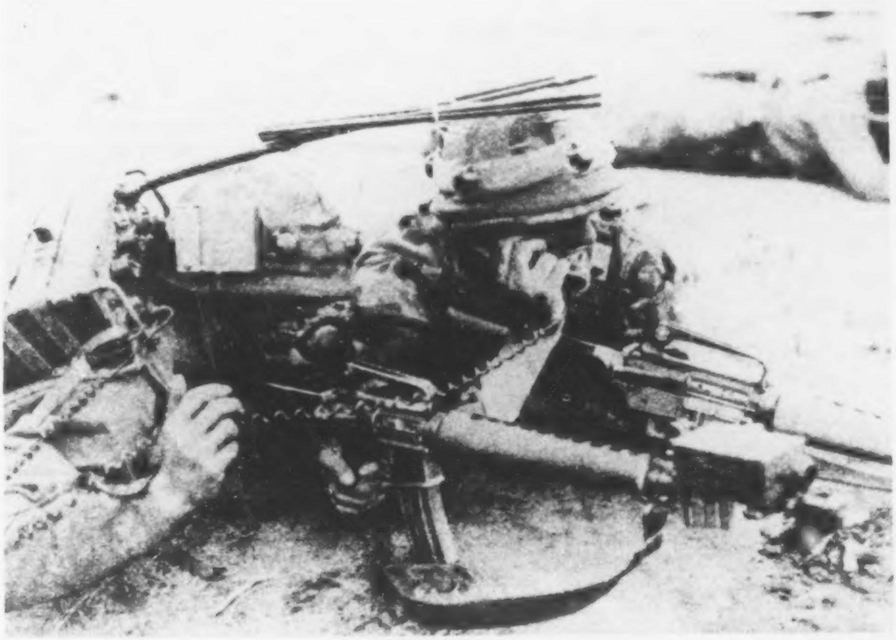
☐ Funds AGR positions and military technicians at a level that is inadequate to promote unit readiness and hazards the activation of essential RC units.

☐ Reduces AC strength by 8,600 soldiers.

E. Conclusion

The Budget reflects a 1.6 percent reduction in purchasing power from FY 88. The FY 89 funding level decrease from its original level is a trend that increasingly challenges our ability to execute our strategy of flexible response and continues to raise the risk to our Nation's security. As the adversaries of the United States continue to spend a greater portion of their GNP on military readiness, research and development, the risk will increase.

In light of the steadily increasing burden of deterrence that our conventional forces must bear, we look to Congress for the money in future budgets to offset that threat. It will then be our responsibility to focus those resources on essential warfighting capabilities, ensuring the forces we provide the unified and specified commanders-in-chief are made up of quality soldiers who are ready, trained, equipped, and organized to deter when possible and to fight and win if necessary.



ACRONYMS

AAMP
Army Aviation Modernization Plan

AC
Active Component

AFAP
Artillery Fired Atomic Projectile

AGR
Active Guard/Reserve

ALB
AirLand Battle

ALRPG
Army Long Range Planning Guidance

AMSP
Advanced Military Studies Program

ARNG
Army National Guard

AOE
Army of Excellence

ASAS
All Source Analysis System

AT
Antiterrorism

ATACMS
Army Tactical Missile System

BCTP
Battle Command Training Program

BFV
Bradley Fighting Vehicle

BMAR
Backlog of Maintenance and Repair

CAS3
Combined Arms and Services Staff School

CBI
Computer Based Instruction

CDE
Conventional Defense Enhancement

CDS
Child Development Services

CGSOC
Command and General Staff Officer Course

CINC
Commander-in-Chief

CMTC
Combat Maneuver Training Center

CONUS
Continental United States

CT
Counterterrorism

CTC
Combat Training Centers

DA
Department of the Army

DEPMEDS
Deployable Medical Systems

DLIFLC
Defense Language Institute Foreign Language Center

DOD
Department of Defense

DPP
Dedicated Procurement Program

EIDS
Electronic Information Delivery System

ERA
Equipment Readiness Analysis

FAADS
Forward Area Air Defense System

FAO
Foreign Area Officer

FOG-M
Fiber Optic Guided Missile

FOTL
Follow-on to Lance

FTS
Full Time Support

FY
Fiscal Year

GSA
General Services Administration

INF
Intermediate Range Nuclear Forces

IRR
Individual Ready Reserve

IST
Invite, Show and Test

ITMS
Integrated Training Management System

JCS
Joint Chiefs of Staff

JSTARS
Joint Surveillance and Target Attack Radar System

LHX
Light Helicopter Experimental

LIC
Low Intensity Conflict

LOGMARS
Logistics Application of Automated Marking and Reading Symbols

LUPS
Logistical Unit Productivity Systems

MACOM
Major Army Command

MANPRINT
Manpower and Personnel Ingtegration

MCA
Military Construction, Army

MEET
Minimum Essential Equipment for Training

MLRS
Multiple Launch Rocket System

MOS
Military Occupational Specialty

MOUT
Military Operations on Urbanized Terrain

MPRC
Multipurpose Range Complex

MSE
Mobile Subscriber Equipment

MTM/D
Million of Ton Miles per Day

MWR
Morale, Welfare and Recreation

NAF
Nonappropriated Funds

NCA
National Command Authority

NCO
Noncommissioned Officer

NCOES
Noncommissioned Officer Education System

NDI
Non Developmental Item

NPS
Non Prior Service

NSNFS
Non-Strategic Nuclear Forces

NTC
National Training Center

NTV
Non-Tactical Vehicles

O&M
Operations and Maintenance

ODT
Overseas Deployment Training

OPTEMPO
Operating Tempo

POC
Programs of Cooperation

POM
Program Objective Memorandum

POMCUS
Prepositioning of Materiel Configured to Unit Sets

PPBES
Planning, Programing, Budgeting and Execution System

PSYOP
Psychological Operations

QOL
Quality of Life

RC
Reserve Component

RCAS
Reserve Component Automation System

RMP
Reprogramable Microprocessor

RSI
Rationalization, Standardization and Interoperability

RTS-MAINT
Regional Training Site-Maintenance

RTS-MED
Regional Training Site-Medical

SDC
Strategic Defense Command

SDIO
Strategic Defense Initiative Office

SINCGARS
Single Channel Ground and Airborne Radio Systems

SNF
Short Range Nuclear Forces

SOA
Special Operations Aviation

SOF
Special Operations Forces

SRIP
Selective Reserve Incentive Program

TMD
Tactical Missile Defense

TSO
Theater Strategic Operations

USAEUR
U.S. Army Europe

USAR
U.S. Army Reserve

YA
Youth Activities

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CHARTS INDICATING GROWTH PATTERN FROM FISCAL YEAR 1976

Senator SASSER. Thank you, General Vuono, for that statement.

Mr. Secretary, I would ask you to provide copies of the slides that you referred to earlier for the record.

I note that your slides also compare 1980 versus where we are in 1988, and I think that is very helpful.

It would be helpful if you would also provide charts that would indicate where we were when we started fiscal year 1976, and that would give us, I think, perhaps a more accurate growth pattern over almost a decade of growth here.

Secretary MARSH. Yes, sir.

[The charts follow:]

WHAT WE'VE DONE

FY76 TO FY 87

QUALITY OF LIFE

48	CHILD DEVELOPMENT CENTERS
72	HARDSTANDS
253	TAC EQUIPMENT SHOPS W/HARDSTANDS
91585*	BARRACKS SPACES
13004	FAMILY HOUSING UNITS

*TOTAL INCLUDES FY78 AND 79 ONLY. NO RECORDS CAN BE LOCATED FOR FY76 AND 77

WHAT WE'VE DONE

FY76 TO FY87

EQUIPMENT INVENTORY

INCREASES

207K INCREASE
IN RC
END STRENGTH

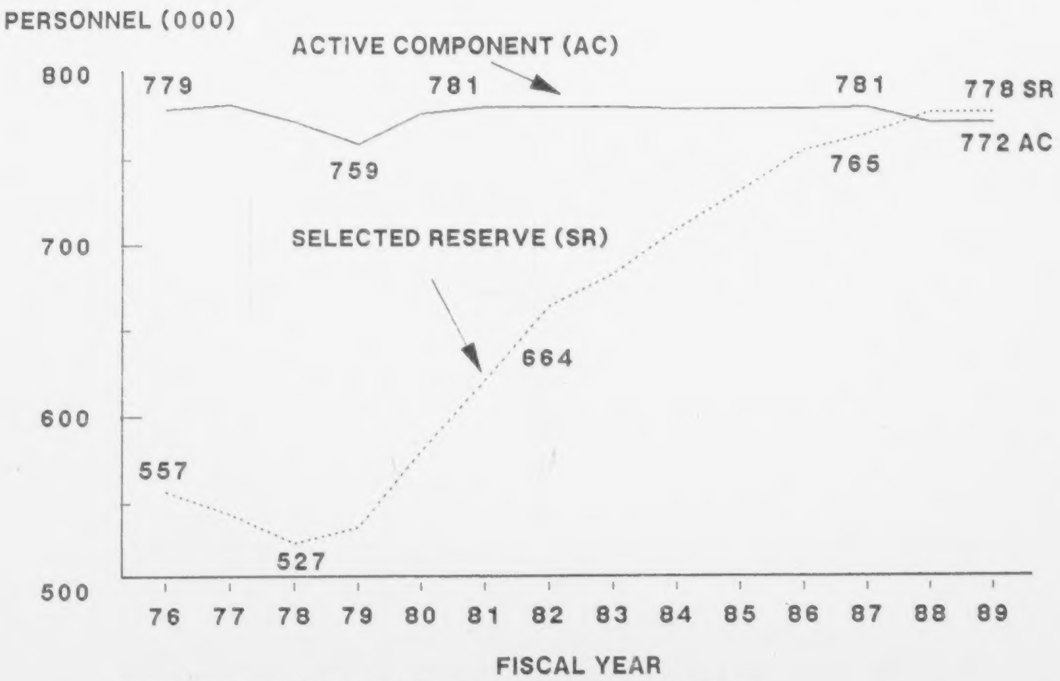
TANKS – 5,965
BFVS – 3,237
APC – 10,948
HELICOPTERS – 1,517
MLRS – 333
HEMTT – 6,963
HMMWV – 21,825
CUCV – 61,719

INCREASE IN
COMBAT
CAPABILITY
62%

CONVERSIONS

AH1G/AH1S	342
M60/M60A3	3,124

STRENGTH OF ARMY

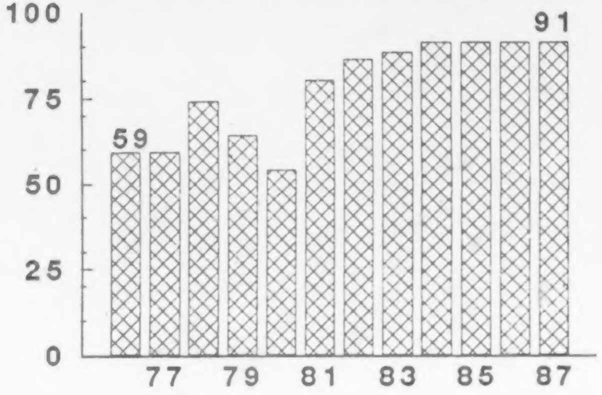


FROM 1980 SELECTED RESERVES STRENGTH INCLUDES IMA.

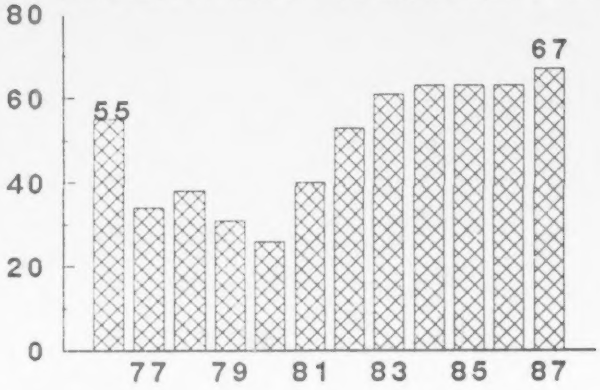
PRIOR TO 1980, THAT CATEGORY FOR SELECTED RESERVES DID NOT EXIST.

ACTIVE COMPONENT ACCESSIONS

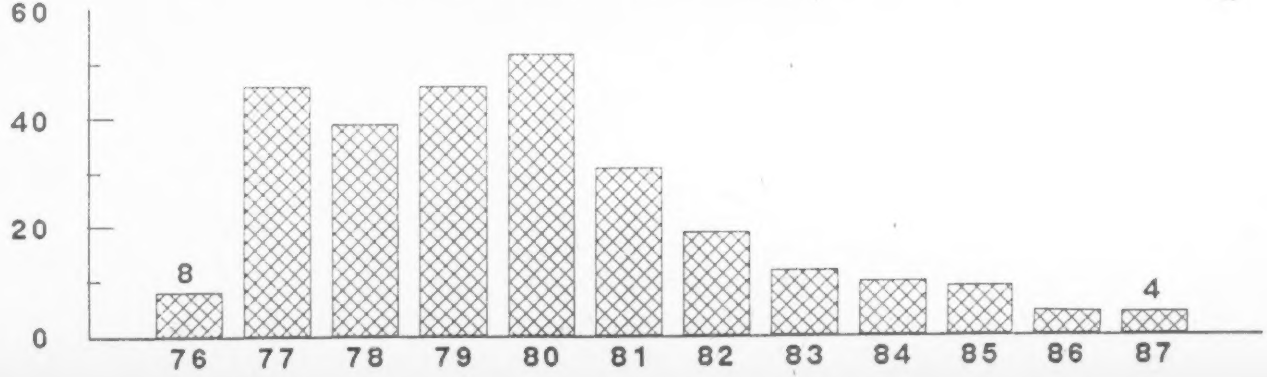
HIGH SCHOOL DIPLOMA GRADUATES
PERCENT FY87 DA GOAL >90%



TEST SCORE CATEGORY I-IIA
PERCENT I-IIIA FY87 DA GOAL: 63%



TEST SCORE CATEGORY IV
PERCENT CAT IV FY87 DA GOAL < 10%



WHAT WE'VE DONE

FY80 TO FY 87

READINESS IMPROVEMENTS

	1980	1987
ACTIVE DIV COMBAT READY	10	16
ACTIVE DIV NOT COMBAT READY	6	2*

* 6 LID AND 10 LID – STILL BEING FORMED

AREAS OF ARMY BUDGET CUTS

Senator SASSER. Mr. Secretary, Secretary Carlucci has testified that about $200 billion must be cut from the 1991 through 1993 Defense budget drawn up under his predecessor, Secretary Weinberger.

Now, the question comes, will the Army continue to reduce force structure, to maintain the readiness levels requested in this budget, or will the Army have to accept lower levels of training to meet this projected cut that is coming in the outyears?

Secretary MARSH. Well, first, Senator, I would respond that you are talking in terms of outyear budgets and outyear estimates of what you are going to spend, and very, very frequently the outyears as to what your program isgoing to be is not achieved, it was not this year, it was not last year, indeed, it has not been during the 1980's. And so I think first we have to keep in context what those long-range projections are.

Second, I would not recommend any reductions in active duty end strength below the present strength because I think the threat is the same. As General Vuono has pointed out, the strategy has not changed, and therefore, if the threat is the same, the requirements that we have for our active duty forces remains the same. I think we must maintain our end strength, have some reasonable growth as we move in the years ahead in order to have the kind of force that is necessary to meet the threat.

General Vuono may want to add to that.

General VUONO. I would say, as you know, we have run with a constant end strength in the Active Army for the last 5 years, and we did that after a conscious decision. And so the cuts that we had to take in 1989, not just in the Active—as I mentioned earlier, the Reserve Component growth and the civilian cuts affect readiness just as the Active cuts do—those cuts that we have had to take increase the risk because the threat is increasing, and the strategy has not changed.

So I strongly urge that we take no additional end strength cuts in the program years.

What we will have to do—you asked, I think the second part of your question had to do with training.

REDUCED TRAINING PROGRAMS

Senator SASSER. Lower levels of training to compensate.

General VUONO. We simply have to look at that program regardless of what the amount is that is reduced. We have got to balance that program so that we have a training program that not only continues the high state of readiness of our force, but also contributes to the attraction and the retainment of the quality force we have right now.

We need to balance and determine where we can, if reductions are necessary in other programs, where best we could take those.

But strongly, I urge no further force structure cuts.

Senator SASSER. All right.

Well, what are the other candidates that you see for producing these savings? Are they going to be in—are you going to have to accept lower levels of training, General Vuono?

General VUONO. As I say, I am going to do all I can not to accept lower levels of training.

Senator SASSER. Well, where else are you going to get the savings?

SLOWING PACE OF MODERNIZATION

General VUONO. Well, where you end up is what we had to do in this case. You end up slowing the pace of modernization and you do not see the growth that you would like to have in sustainment.

Senator SASSER. So eventually it is going to get into your procurement?

General VUONO. Certainly it will.

GROWTH IMPACT ON PROCUREMENT

Senator SASSER. Well, now, another matter of concern, you mentioned in your statement that the O&M accounts have grown over a period of from 1986 to 1989 from 30 percent of the budget to 33 percent, and in a like period, from 1986 to 1989, the personnel accounts have grown from 36 to 38 percent.

Now, my question to you, does this trend of growth in these accounts, General Vuono, is that a matter of concern to you, and if these accounts continue to grow, are you not also going to have this growth also impacting on your procurement?

General VUONO. I think that certainly the growth that you mentioned in both the O&M and the personnel accounts were necessary both for training and readiness and for the attraction and retainment of the force. So I think that that is the reason that we had that growth.

Senator SASSER. But the real question with regard to that is this is going to be additional pressure, it appears to me, unless it is controlled, which is going to reduce your procurement flexibility in the outyears since you are operating with decreased funding going in and you have got the O&M and the personnel accounts continuing to grow on you. Is that not an accurate statement?

General VUONO. Oh, I think it is, if there is no relief on the overall funding level for the Army budget.

Senator SASSER. Well, I frankly do not see any relief on the horizon, General Vuono, to be perfectly frank about it. That is one Senator's observation. Senator Stevens may have a differing view, but I do not see any fiscal relief on the horizon for the Army or any of the other services in the immediate future.

GUARD AND RESERVE BUDGET

Secretary Marsh, I have long believed that perhaps we get one of the biggest bangs for the buck out of the Active Reserve and our Guard units, and there appears to be a substantial disparity on observation between the 1989 O&M budget for the Active Army and that of the Army Guard and the Reserve.

Now, the Guard and Reserve make up half of the Army's manpower, 50 percent of its combat capability, and over 70 percent of its combat service support, yet the Army's total O&M budget is $26 billion, and only $2.6 billion, or 11 percent, is allocated for the Guard and the Reserve.

Now, I believe that the Guard and the Reserve are a bargain, and in amending the 1989 budget, it looks as though the Army took care of the Active Army at the expense of the Guard and Reserve.

In 1989, the Active Army budget will increase by $954 million. But the Guard and Reserve are decreased by $122 million, and that is without considering the effects of inflation.

Now, Army operating tempo and flying hours are increased above 1988 levels, but the Guard and the Reserve are reduced.

Now, given the cost-effectiveness of the Guard and Reserve, and given the fact that most disinterested observers would say we are going into a period now of fiscal austerity—Secretary Carlucci is saying we are going to have to peel off $200 billion in the next 2 or 3 years—should we be increasing Guard and Reserve readiness rather than decreasing it? Would that not be a way that we could cut expenses?

And why did the Army decide to increase operating tempos for the Active Army but not for the Guard and Reserves?

Secretary MARSH. Senator, I think several observations can be made.

RESERVE COMPONENTS

First, I would tell you that in the Army there is a very strong view both from the military and civilian leadership, that support the points that you have made. What has been done in the Army Guard and Reserve to make them more full partners in our force has been very, very significant. This is in equipment, and this is in training. The use of National Guard in one or two instances, Reserve units for roundouts for Active forces has been extraordinarily successful.

I think you will see that we have had a consistent ramping up of equipment and modernization programs that relate to the Guard. Indeed, of the three Apache battalions that are coming on stream, one goes to North Carolina, one goes to South Carolina, one goes to Florida, and we are looking at another battalion of Apaches for the Guard and Reserve. M-1 tanks are in the National Guard; for example, North Carolina.

I think if you look at the investment of time that Guard and Reserve personnel put in of roughly 39 days a year, of which 2 weeks is on Active duty, that the figures are not as disparate as they appear to be in your readiness accounts.

I can say to you that in the preparation of that budget on operation and maintenance, very careful consideration was given to Guard and Reserve concerns, and we think the budget is responsive to the readiness program that we have laid out for them and that they can be responsive to.

And I would say to you on the flying hours, I know that a lot of thought was given to that because the numbers of flying hours that you require for the active, 365 days a year, must, on a per-month basis, be greater than the number of hours that you require of our Reserve Components.

So we think that there has been a conscious effort to be responsive to that need, and we will continue to be responsive to it.

Senator SASSER. Thank you, Mr. Secretary.

I might say, just to set the record straight, the Army did not direct those Apaches to the Guard out of the total goodness of their hearts. You know, I think we in the Congress directed that that be done, if memory serves me correctly.

My time has expired.

Senator Stevens.

Senator STEVENS. Thank you very much.

Pardon us. We are conducting some planning here at the same time.

Mr. Chairman, I think that we are coming up on a cloture vote here pretty soon, and I am sure that my friend here from Mississippi wants to ask some questions. So let me proceed to about three areas.

OLYMPIC SUPPORT

One, you know, I have been involved for a substantial period of time in trying to ensure congressional support of the Olympics. I just noted in the last Olympics that we have just come through the number of foreign competitors that had military rank, and I looked over some history and found that in the past there were substantially more people in the military who were competing than we have now.

Is there any kind of policy to try to encourage those people to enlist? Do you still have a special Olympics training unit that you had 20 years ago?

Secretary MARSH. Senator, there is a program to identify and encourage not just Olympians, but other nationally qualified athletes. We do not have a stable program but we do make arrangements to assist and to accommodate soldiers who are candidates for the Olympics or in other national and international competition such as boxing and wrestling. I will tell you that there will be military people in the summer games. A substantial number of those military people will be Army people, and they are encouraged and assisted in doing that in training programs and this type of thing.

General Vuono might want to respond.

General VUONO. For example, I think boxing is one where we have always fielded some strong competitors, and this year will be no different.

Senator STEVENS. Well, I have been asked to work with George Steinbrenner on this commission concerning the problems of the Olympics and our developing teams and improving the quality of our participation. I would like to suggest that you convey to the Secretary my feeling that there ought to be a reanalysis of the Defense role, and particularly the Army.

Before I came to the Senate, I remember we had two training courses at Fort Richardson, and a substantial number of the competitors in two events trained at that Army base. It is a real problem sometimes to maintain these courses so that civilians can participate, and the reason I mention it is that I think we are coming into a period where we have had such tremendous success in enlistment and reenlistment, I think to a great extent the role models that are coming out of this whole Olympic process are not coming from the services as they used to.

If you go back into some of the Olympics in the 1930's, an overwhelming number of those people were in the military, and they are not anymore. And I think that is our fault. We have got to have some reemphasis, and it may be that we ought to have some help from the private sector to ensure that we have facilities. But some of those facilities could be on your property.

I would urge you to give some thought to it because I think it will have a great deal to do with future enlistment. I do not want to belabor it, but I really think that you ought to do that.

DOLLAR/YEN CHANGE

Now, second, I had a discussion this morning with a person that is retired from the banking community, and I was telling him about the problem we mentioned here yesterday or the day before yesterday concerning the change in the yen from 163 to 128 since this budget was submitted, and almost a 48-percent increase in overseas costs where we have to expend dollars to buy foreign currency, at least in Japan, almost a 40-percent change since January.

I was complaining a little bit about that, and he said, "Well, that is your fault. You should give them authority to get involved in some of the monetary transactions that will give you a hedge against such increased costs and allow the military to have a greater opportunity to balance out those changes."

You do not have that authority now, do you? You do not have the authority to buy in advance, to, in effect, hedge against changes in future valuation?

Secretary MARSH. I am going to ask General McCall to respond.

There was a suggestion that Defense establish a pool——

General VUONO. It is only on nonappropriated funds.

General MCCALL. To answer your question, sir, we are precluded by law from hedging in appropriated funds. We do buy advance contracts in nonappropriated fund entities.

Senator STEVENS. General, I would like to work with you.

Would you give us for the record a statement on what that hedging capability has given you in terms of the nonappropriated funds, how much more effective have your expenditures been in that area because of your ability to buy ahead and to deal with a future transaction. Could it come over into this area?

You have a very heavy foreign expenditure requirement on a daily basis. I think we ought to look at that because this is going to continue to be volatile in the future, and we ought to see if you need some more basic authority.

I would like that this year so we can look at it and see if we can find some way to deal with that.

General McCALL. Sir, I would like to respond. The nonappropriated fund authority is only 1 year old. Before that we had nothing. So we have that year's worth of experience.

Senator STEVENS. You just have 1 year's experience.

General McCALL. Yes, sir.

Senator STEVENS. Could any of your people extrapolate back and see what it would have been if you had had it before?

General McCALL. We certainly can, sir.

[The information follows:]

NAF AUTHORITY

The authority to engage in hedging in foreign currencies was issued to central nonappropriated investment funds and military exchange headquarters on 18 June 1987. Department of Defense guidance states that hedging techniques must only be used by nonappropriated fund instrumentality [NAFI] fund managers to assist them in effective management of the fund's assets. They will not be used for speculation.

Upon notification of this authority, the Army and Air Force Exchange Service [AAFES] established a hedging committee, developed operating procedures, and selected servicing financial institutions. Only one hedging transaction has matured. It was a $5 million purchase of yen that has resulted in a cost avoidance of $140,000. AAFES currently has $80 million outstanding in foreign currency hedging transactions and plans to derive maximum benefit from the authority provided.

The U.S. Army Community and Family Support Center [CFSC] has also established an apparatus for management of foreign currency hedging as authorized for the central Army Morale, Welfare and Recreation Fund. Governing policy has been formulated and disseminated to all concerned activities. The hedging authority has not yet been exercised primarily because it has not been considered an opportune time for the major currencies involved. However, CFSC will begin hedging when the conditions are projected to be more favorable.

Although a precise dollar amount cannot be provided, it is certain that substantial costs could have been avoided had the hedging authority been provided and exercised in the 1985–87 timeframe.

FORT WAINWRIGHT

Senator STEVENS. Lastly, Mr. Chairman, I will just get real provincial, and that is the Fort Wainwright situation.

Let me state my understanding of what happened to the 6th Light Division at Fort Wainwright. The proposal defers activation of one infantry battalion until 1990; one infantry battalion that was destined for Fort Richardson will not be deployed. Instead, the Army will look to a new Alaska Army Guard unit that will round out the brigade at Fort Richardson.

The MilCon projects that were scheduled for Fort Wainwright are, as I understand it, on schedule. It is in the budget request to keep them on schedule, and we will have a problem with MilCon funds for the new Guard unit that will round out the brigade that will have to be crossed. That is not in this budget, as I understand it.

The revised deployment plan will not see an additional Active battalion moved to Alaska until 1990, but the current plan for facilities and housing for the brigade is being modified consistent with that deployment schedule.

Now, is that your understanding?

General VUONO. We had two battalions that we were going to activate in 1989. We are not activating either of those two battalions. We are activating the brigades and we are proceeding with the military construction.

We are going to put a Guard battalion there.

Senator STEVENS. At Richardson?

General VUONO. Yes; we do not have the funds in the budget for the Guard armory we talked about.

We are looking to see if we have spaces to activate that Active battalion in 1990. That is the present status of it.

Senator STEVENS. I understand. You do not have that request before us, so we will just have to fight that fight. But that is the plan. If we can do it, it will come in in 1990 rather than 1989.

I want to tell you, Mr. Chairman, this has been one of the most difficult problems that I think that we have faced in terms of the reductions, and the Army in particular, and Secretary Marsh and his assistants also have been very, very active in trying to preserve this light division concept for Alaska, and I am grateful to them.

I think that you should know that the impact of this is that we take our part of the ax like everyone else, but we are still going to have a light division eventually. Is that fair to say?

Secretary MARSH. Yes, sir.

Senator STEVENS. I thank you gentlemen for that, and that is all my questions.

Senator SASSER. Thank you, Senator Stevens.

Senator Cochran, you have been waiting here patiently.

Let me just tell you a problem that I have. Senator DeConcini sent word this morning early that he would like to come and ask a couple of questions at this time, that he has got a problem with another engagement. So I will put it to you, Senator Cochran, should we let Senator DeConcini go in front of you or not?

Senator COCHRAN. No, I do not think he ought to. [Laughter.]

I have one question, Mr. Chairman. I think he will probably yield for that purpose.

We all are going to have a vote, I think, in about 2 minutes on cloture, are we not? So we all have business somewhere else.

Senator DECONCINI. OK.

Mr. Chairman, if the chairman would yield, why do we not split the time between now and the vote. That is fine with me because the Senator is right, there is a vote at 11:30.

Senator COCHRAN. And that clock is not right, either.

Senator SASSER. We have got 8 minutes, I am advised.

Senator COCHRAN. We are going to use it up chitchatting, probably.

Senator SASSER. Why do you not ask a quick question?

Senator COCHRAN. Thank you, Mr. Chairman.

I thank the distinguished Senator from Arizona.

TROOP UNIT MOVEMENT TO HONDURAS

Mr. Secretary, I noticed that in the recent exercise involving Army units being ferried to Honduras that some of our Mississippi Air National Guard aircraft, C-141's, were utilized in that exercise.

I wonder if you considered that a success and a good model for cooperation between Guard units and regular units of the Army?

Secretary MARSH. I will make a preliminary response and then defer to the Chief.

That is typical of examples that are occurring almost every weekend and during Active duty training periods where the Air Guard and the Air Reserve are playing a vital and essential role in these regular exercises.

General Vuono helped plan that exercise, so I will defer to him.

ACTIVE AND RESERVE TRAINING

General VUONO. It was absolutely a superb exercise of strategic mobility using Active and Reserve members of the Military Airlift Command, along with the ground forces where we moved from multiple locations, east coast and west coast, on short notice. It is one of over 300 emergency deployment readiness exercises that we conduct a year in terms of joint operations, and it went off extremely well.

As a matter of fact, I think one of the lead aircraft that took the troops from Bragg was piloted by a Guard officer. That was a Guard crew. It just happened as they went through the alert procedures, that is the aircraft under the schedule that went in.

And I talked to both the Commander-in-Chief Southern Command, General Woerner, just yesterday, and I talked early this morning to the Corps Commander, Gen. John Foss, who was just down there yesterday, and the reports on the actual deployment and then the in-country training just could not be better, a first-class effort on the part of the total force.

Senator COCHRAN. I know that one of the concerns of the Army is to try to engage in training exercises and adhere to safety precautions and make sure nobody gets hurt accidentally. A recent event involving helicopters that collided during training illustrated again that this is a dangerous business, even when you are not engaged in hostilities.

How did the exercise in Honduras go? Were you able to accomplish your purposes there without casualties? What was the result?

General VUONO. The deployment went extremely well as far as safety is concerned. We parachuted in a task force of about 700 soldiers, and we had three minor injuries on the jump, which is superb.

We did have a helicopter that went down 2 days ago, a command and control helicopter, with the command and control element of one of the brigades that went in. We are investigating the reason why. There were no serious injuries. The most serious injury was a broken leg. And the aircraft had moderate damage to it. It was a malfunction on the aircraft; no involvement of other aircraft.

So far it has been a very good exercise.

Senator Cochran. Well, I commend you for that, and I think you have demonstrated a great deal of leadership skill in putting the exercise together and carrying it off as you did.

Senator Sasser. Thank you, Senator Cochran.

Senator DeConcini?

Senator DeConcini. Mr. Chairman, thank you.

I want to thank my friend from Mississippi. I am going to submit eight of my questions also, due to the time, and I do thank the chairman. I have been holding hearings on a constitutional amendment to balance the budget. That is why I could not be here for all of this.

MULTIYEAR PROCUREMENT

But Mr. Secretary, the new Secretary of Defense has stated that weapon systems will be procured at economic production rates. Dr. Costello of OSD has expressed his conviction that significant savings can be realized by multiyear procurements which incorporate his "could cost" concept. These comments, combined with the stark reality of an austere budget environment, would seem to dictate that we proceed with multiyear procurements with the required Apache helicopters to ensure the lowest possible cost. This would be in the interest of our national security, of course, and of the taxpayers, and in this light, I submit that the Apache multiyear procurement makes good economic sense.

Is the Army willing to do this, and if not, can you explain why?

Secretary Marsh. Senator, that is an area that I just referred to General Pihl who is actually working that program——

Senator DeConcini. Fine.

Secretary Marsh. And that is currently being discussed.

Do you want to add to that?

Senator DeConcini. General Pihl, thank you.

MULTIYEAR PROCUREMENT

General Pihl. Yes, sir; we are in consultation right now with McDonnell-Douglas, the prime. We have challenged them to come forward with two proposals, one what the price would be for single-year helicopters as a part of our aviation modernization plan, and then what the multiyear exhibits would be.

That would task us to take a look at some long lead money in 1989 if we decide to go to a multiyear for economic order quantities, and we would have to find an appropriate window to request that in the budget process.

Senator DeConcini. They have not given me the figure, but they have told me that it would be a substantial savings. That means to me more than a few thousand dollars. We are talking about big dollars.

Have you seen those proposals at all?

General Pihl. I have not yet, sir. Mr. Brown, the president of the company, was charged by Dr. Sculley, my boss, to do that.

Senator DECONCINI. So it is safe to say that you are certainly receptive to that if it makes economic sense the way that McDonnell is proposing it.

General PIHL. Indeed, we are.

Senator DECONCINI. That is true of other weapon systems as well?

General PIHL. Yes, sir; we are on contract right now for the M-1 tank in a multiyear.

Senator DECONCINI. Yes.

General PIHL. We want to consider moving into others to stabilize the programs and buy them at the best rate we can get for the dollars.

M-1 TANK SAVINGS

Senator DECONCINI. And has that brought a savings to the Army, the M-1 tank multiyear procurement?

General PIHL. Yes, sir; the M-1 tank savings have been significant.

Senator DECONCINI. Can you supply us—maybe you have already—what that is, just for the record, and what it would be if you did not have the multiyear?

General PIHL. Yes; we would be glad to do that.

[The information follows:]

MULTIYEAR PROCUREMENT SAVINGS—M-I TANK

As a result of multiyear contracting, the Abrams tank program has realized a cost avoidance of $702 million.

FIRE AT FORT HUACHUCA

Senator DECONCINI. One of the other questions I have, Mr. Secretary, and maybe General McCall or someone will have an answer for me, last year at Fort Huachuca a fire destroyed 23 World War II vintage buildings. Many of these similar antiquated structures still remain. These wooden structures and buildings are completely inadequate. Last year after the fire I successfully put language in the military construction bill, with the help of the distinguished chairman from Tennessee, directing a reprogramming request to accommodate new construction and personnel who were displaced by the fire.

In this year's military construction budget, the capital Headquarters building addition costing $570,000 has been dropped from the budget. In light of the need at Fort Huachuca to replace the World War II buildings, due to the worst fire in peacetime history and because of the need to secure electronic surveillance with an impending Soviet visit under a ratified INF Treaty, why was the headquarters building dropped?

Secretary MARSH. Senator, I am not in a position to respond to that. I will get you an answer, though.

General McCall?

General MCCALL. Sir, I cannot speak to that specific building. We did work on a priority process, and I will have to get you an answer.

General VUONO. We will have to get that for the record, but as they said, we prioritized this, and we will just have to see where that was in the prioritization.

As you know, Senator, our MILCON was cut drastically as a result of the decrement, and it may have fallen out during that process.

Senator DECONCINI. Well, General, do I interpret from that that the fact that the committee puts in language directing you to reprogram money, that that is just ignored, and we should consider doing something else if we feel a necessity that an agency or department take another direction?

General VUONO. No, sir, not at all. As I say, we will go back and see what happened to that. I just do not have the information at my fingertips.

Senator DECONCINI. All right, thank you.

I do not mean to be confrontational, but it troubles me, not that we are right and you are wrong, but we have to study these things and come to some conclusions, and it just seems to me in light of this long history of inadequate facilities at this base that it was the right judgment, and it troubles me when the law says to do something and it does not happen.

General VUONO. I do not know whether this is the case, and I will not belabor the point, but it may be that we could not get the amount of planning done necessary to get it in this particular year.

Senator DECONCINI. I see. Maybe it is coming.

General VUONO. I do not know. I will just have to go back and check.

Senator DECONCINI. That is fair enough.

General VUONO. Sometimes we are not able to get the planning done in time, and that may be the case in this situation.

Senator DECONCINI. General, thank you very much, and Mr. Chairman, thank you again for your constant assistance, particularly in this area of Fort Huachuca. This would not have happened, the language would not even have been in the bill if it had not been for you and your staff being willing to help us.

I will submit the balance of my questions.

[The information follows:]

HEADQUARTERS BUILDING ADDITION

The headquarters building addition was originally programed in the Army's 1989 program as a part of the biennial 1988/1989 submission to Congress in January 1987 at a cost of $570,000. Subsequently, the July 5, 1987, fire that destroyed 23 World War II buildings and a major heat plant, caused a shortage of testing space that severely impaired the installation's vital electronic equipment testing mission. The requirement for the headquarters building addition was not a result of damage from the fire. The need for the headquarters building addition project has been superseded by the requirement to relieve the space needs of the electronic equipment testing mission. The electronic test and evaluation facility, programed and submitted to Congress at $5.4 million, is intended to relieve the serious problem of adequate space for electronic equipment testing at Fort Huachuca. The headquarters building addition project is still a requirement, but because of the reduced level of funding contained in the amended fiscal year 1989 military construction, Army [MCA], request, funds were not available to program the project. It will be considered for inclusion in a future program.

INF TREATY

Senator SASSER. Thank you, Senator DeConcini.

We have got a little more time here, Senator Cochran. We cut you short. We do not want to deprive you of the opportunity to ask a burning question here, so if you have another one.

Senator COCHRAN. I believe I have all cooled down.

Senator SASSER. Let me ask, Mr. Secretary, let me direct this question to you and General Vuono together. Perhaps one or both of you would like to answer.

With regard to the INF Treaty and the proposed demobilization of the Pershing II's, how much direct and indirect military and civilian end strength are associated with Pershing II, and are all of these personnel based in Europe?

Secretary MARSH. Are what, sir?

Senator SASSER. The question——

Secretary MARSH. I heard the question; I did not hear the last word.

Senator SASSER. How many of these Pershing II personnel are in Europe? Are all of them in Europe?

Secretary MARSH. Yes.

Senator SASSER. Would you pull that microphone a little closer, Mr. Secretary?

PERSHING II PERSONNEL

Secretary MARSH. General Vuono points out we have some of the Pershing II people at Fort Sill.

The bulk of the people, Senator, are in Europe. They are in Germany, and I think you are looking at about, around 5,500 U.S. soldiers in the Pershing units, between 5,000 and 6,000.

And your dependent relationship I think is around 8,500.

Senator SASSER. You have got about 5,000 soldiers, about 8,500 dependents?

Secretary MARSH. I think so; yes, sir.

Senator SASSER. What are the costs? What are the operation and support costs, approximately, ballpark figures, for the Pershing II system?

Do you have that?

General VUONO. I think we will have to provide that for you for the record.

[The information follows:]

PERSHING II O&M

In fiscal year 1987, the Army obligated $92.1 million for the operation and maintenance of the Pershing II system. Included in this amount are the costs of headquarters command and control, combat support, combat service support, and organizational level maintenance.

PERSHING II WITHDRAWAL TIMETABLE

Senator SASSER. All right.

Would you also please provide a timetable for the deactivization of Pershing II sites under the INF Treaty in the event it is ratified?

Do you have any information on that presently, General Vuono?

General VUONO. Would you repeat the first part of the question, Senator?

Senator SASSER. I am asking about a timetable for the deactivation of the Pershing II sites under the INF Treaty.

General VUONO. I would like to provide the details of that for the record. We are in the process of working that right now.

[The information follows:]

PERSHING II WITHDRAWAL

In accordance with the INF Treaty elimination schedule, withdrawal/elimination of [deleted] USAREUR Pershing II systems, will occur during the first 29 months after the effective date of the treaty. Withdrawal/elimination of the remaining [deleted] USAREUR systems will be completed during the final 7-month period.

IMPROVEMENT OF CONVENTIONAL CAPABILITIES IN EUROPE

General VUONO. As you know, one of the things that we want to do is improve our conventional capabilities in Europe, and it is with that in mind that we will work the deactivation of the Pershings and the use of those resources, personnel resources.

Senator SASSER. So what you intend to do is simply convert these Pershing II personnel over to other duties in Europe?

General VUONO. We do not intend to reduce the Army troop strength in Europe.

Senator SASSER. Well, General Vuono, you might be interested in knowing that just Monday of this week we held hearings here before the Military Construction Appropriations Subcommittee, myself, and Senator Stevens, and one of the principal subjects discussed in that hearing was increased burden sharing on the part of our allies, and particularly our NATO allies. We heard from Secretary Armitage and others on that particular subject. And it has occurred to me that—we were talking in terms of trying to reduce, ultimately, American troop strength in Europe.

And it has occurred to me that with the deactivation of the Pershing II sites in Europe, and with the deactivation of the ground-launched cruise missiles on the part of the Air Force in Europe, Senator Stevens, we could be looking at a reduction in force there of active military personnel in Europe, if memory serves me correctly, of about 15,000, and also, a reduction in force of about 18,000 dependents in weapon, and 1,200 approximately civilian employees who support the Air Force GLCM operation in Europe.

So you may find, General Vuono, that there are some Members of Congress here who might be interested in seeing those Pershing II personnel come home rather than keeping the same end strength in Europe.

General VUONO. Mr. Chairman, if I could respond to that. We have had a conventional imbalance in Europe before we worked the INF Treaty. I think it would be a major mistake, notwithstanding the points you have made, to reduce our conventional capability in Europe at a time, in my view, when we should be improving our conventional capability. And I believe very strongly this is absolutely not the time to even consider reducing any of our troop strength in Europe.

Secretary MARSH. I would say, Mr. Chairman, that I concur in that view of the Chief. I think it is a very sound position, and it is the position of the Army.

Senator SASSER. Well, Mr. Secretary, you said in your opening statement that the Army had increased combat capability over the last few years by 62 percent, and that was a very encouraging observation and one that I applaud.

Given this very substantial increase in Army capability, we could, I think, send a strong signal here to some of our NATO allies with the deactivation of these Pershing II sites and bringing some of those personnel home, that even though we are concerned about conventional strength in Europe, we have increased our capability, and we are not going to do any more, that it is up to them to try to pick up some of the slack here with regard to conventional capability.

I might say, General Vuono, that the argument that with the ratification of the INF Treaty and pulling the intermediate nuclear missiles out of Europe, that this puts increased reliance on conventional capability is very much the same argument that I made in Spain just a few weeks ago with our NATO allies in Spain with regard to having to pull out of the air base there in Spain, taking the 401st Tactical Wing out of there.

General VUONO. Mr. Chairman, could I just make one point on that?

Senator SASSER. But my point is this. What is sauce for the goose is sauce for the gander.

General VUONO. I understand.

Senator SASSER. And simply because there might be increased reliance on conventional capability in Europe as a result of the ratification of the INF Treaty, I think our NATO allies ought to feel that pressure also.

The question comes, how much have they increased their combat capability over the past 8 years?

General Vuono, you might want to address that, or Secretary Marsh; while we have been increasing ours 63 percent, how much have they increased theirs?

BURDEN SHARING

Secretary MARSH. There has been a significant increase in the last 10 to 15 years of the Allies' contribution to what we are doing in Western Europe. The amount of their defense spending has increased more than ours, but you are dealing with a different base. Our base is much larger, of course.

One of the reasons that we make a substantially greater contribution is that they do not make the nuclear contribution that we make, which is a part of our policy not to proliferate those nuclear weapons.

Of the eight corps in Europe, I believe six of the eight corps, and Carl can speak to this better than I, six of the eight are Allied; they are not United States. I believe that 80 percent of the tanks are Allied, and not U.S. tanks. And I believe that maybe pretty close to 90 percent of the personnel is Allied and not United States.

General Vuono may want to add.

General VUONO. Yes; those figures are the same that I would use.

So I think we all would agree that more can be done. To get back to the one point you mentioned about the chart that we showed on our increased capability, and certainly with the help particularly of this committee, we have increased tremendously the capability of the United States. I would also say that our potential enemy has also increased his capabilities a significant amount, and if you look at any of the assessments, it will point that out.

I believe that reductions in force in Europe is not a prudent way to go at this time. I just believe that we should do all we can to increase the capability we have over there.

Senator SASSER. I want to yield to Senator Stevens at this point.

Senator STEVENS. Just on this point, I asked this yesterday, too, you mentioned, each of you, the increased contribution or increased spending of our NATO Allies, but when we get that, it is in their currency rather than ours.

NATO EXPENDITURE RATE

Can you give us a chart on that showing what that expenditure rate is in terms of our dollars?

Secretary MARSH. Yes, sir.

Senator STEVENS. They really are spending, in my judgment, fewer U.S. dollars in terms of their efforts over there. As ours is increasing, theirs is actually going down in terms of dollars.

I would like to see if that is true.

General VUONO. We will provide that for the record for you, sir.

[The information follows:]

NATO BURDEN SHARING

Exchange rate fluctuations exert an important influence on international comparisons of defense burden sharing. For example, when the value of the U.S. dollar falls in terms of the currency of another NATO ally, that country's defense budget appears larger when converted to dollars. Nevertheless, the result of that investment remains at the same level within the country, despite the fall in terms of the dollar.

In the past year, most NATO currencies have remained fairly stable in terms of each other while most have strengthened against the dollar. None have appreciated significantly.

The following chart was extracted from the Secretary of Defense's Report to the United States Congress on Allied Contribution to the Common Defense, dated March 1988.

CHART A-13

Total Defense Spending (FY)
(1986 Constant Dollars in Billions - 1986 Exchange Rates)
(Including Spain)

	1971			1986			Total % Change
	$	% of NATO & Japan Total	Rank	$	% of NATO & Japan Total	Rank	71 vs 86
Belgium	$ 2.20	0.7 %	10	$ 3.40	0.8 %	10	+55.1
Canada	$ 5.63	1.7 %	7	$ 7.90	1.8 %	7	+40.3
Denmark	$ 1.49	0.4 %	12	$ 1.65	0.4 %	14	+10.8
France	$ 19.20	5.8 %	4	$ 28.46	6.6 %	2	+48.2
Germany	$ 22.01	6.6 %	3	$ 27.69	6.4 %	3	+25.8
Greece	$ 1.17	0.4 %	14	$ 2.42	0.6 %	12	+106.5
Italy	$ 10.37	3.1 %	5	$ 13.46	3.1 %	6	+29.8
Luxembourg	$ 0.03	0.0 %	16	$ 0.05	0.0 %	16	+100.4
Netherlands	$ 4.32	1.3 %	8	$ 5.32	1.2 %	9	+23.2
Norway	$ 1.50	0.5 %	11	$ 2.17	0.5 %	13	+44.7
Portugal	$ 1.25	0.4 %	13	$ 0.94	0.2 %	15	-24.9
Spain	$ 3.96	1.2 %	9	$ 6.01	1.4 %	8	+51.8
Turkey	$ 1.09	0.3 %	15	$ 2.77	0.6 %	11	+153.1
UK	$ 24.36	7.4 %	2	$ 27.33	6.3 %	4	+12.2
US	$ 224.10	67.7 %	1	$ 281.10	65.3 %	1	+25.4
Japan	$ 8.31	2.5 %	6	$ 19.84	4.6 %	5	+138.7
Non US NATO	$ 98.57	29.8 %		$ 129.57	30.1 %		+31.4
Non US NATO + Japan	$ 106.88	32.3 %		$ 149.41	34.7 %		+39.8
Total NATO	$ 322.67	97.5 %		$ 410.67	95.4 %		+27.3
Total NATO + Japan	$ 330.98	100.0 %		$ 430.51	100.0 %		+30.1

OPTEMPO FOR RESERVE COMPONENTS

Senator SASSER. Secretary Marsh, we were discussing a moment ago the operating tempo of the Guard units as opposed to the Active Army units, and I was just reviewing some testimony that will be delivered tomorrow by General Temple of the Guard, and he was making the statement in his testimony that their air operating tempo under this budget will be reduced to 7.8 hours per crew per month.

He indicates that they need a minimum of 9.0 hours per crew per month to maintain their proficiency.

What are we going to do about that? In other words, we have got a situation here where the Guard is saying that with regard to air crews and their helicopters, they simply cannot maintain proficiency at the operational tempo that they are being funded, or at the level they are being funded.

Secretary MARSH. Is he referring to the Air Guard or the Army portion?

Senator SASSER. He is referring to the Guard and operation of helicopters, as I understand it; yes.

It is General Temple's statement. It says funding will support 360,000 hours in fiscal year 1988 and 341,000 hours in fiscal year 1989. The fiscal year 1989 budget falls short of funding the 365,000 hours needed to meet air crew training minimum requirements.

Under these circumstances, aviation units will experience reduced training readiness because of a shortage in flying hours.

Now, my concern is that we are going to be putting the Guard in the position of being somewhat of a hollow organization itself if their air crews are not getting enough hours to maintain proficiency.

General VUONO. Well, Senator, when we reviewed the decrement and went through where we wanted to apply the reductions, we looked very carefully at both Active and Reserve flying hours and OPTEMPO, and it was our view that we were funding them at a flying hours level that would allow them to maintain a minimum essential near term readiness.

We will go back now and review that program. I believe that what we did was satisfactory. Obviously we would like to have funded them higher, just as we would like to have funded the Active higher.

But we will go back and review that to see if, in fact, there is too much degradation in their flying hour readiness. We will certainly make a conscious effort to address that.

Senator SASSER. Thank you, General.

Senator Stevens?

Senator STEVENS. Yes, sir.

V-22

I have just one last question, and that is with the new cost statistics on the V-22. Are you going to give that another look, at least for your Special Forces concepts? The Marines have, you know, come in very strong—I understand the difference in battle tactics—but it seems to me at least in Special Forces you ought to have a similar need.

Are you going to look at that again?

Secretary MARSH. We have not ruled it out, Senator. It is not a part of our program, but certainly if it develops into a viable concept, we will re-look it.

General VUONO. But it is not now a part of our aviation modernization program.

Senator STEVENS. I know that. That worries me because of the problem we are going to get in the multiplicity of lines again in terms of the new equipment items, and it is going to result in higher costs to both services unless we can find some way to have a balancing off of the Marines and the Navy as to what they want to do and what you want to do.

At present, I think if you had stated your requirements, the costs would come down even more for the overall buy. I would encourage you to take a look at it and see what you are going to do in the future. The V–22 has got overwhelming support in Congress now. I do not think there is any question the Marines are going to get it. I do not know yet what the final cost will be, and I do not think they would give us that cost until they see what the quantity is going to be for future production.

Thank you, Mr. Chairman.

Senator SASSER. Thank you, Senator Stevens.

Mr. Secretary, we understand that except for $490 million of foreign currency cost, the Army has accommodated all of its 1988 so-called must pay costs such as CHAMPUS within its 1988 operations and maintenance appropriations.

Now, if the use of unexpired balances for foreign currency is not approved by Congress, how will the Army finance these foreign currency costs?

Secretary MARSH. We will just have to eat it, Senator.

General McCall may want to respond to that because we were discussing it this morning.

General MCCALL. Sir, in addition to the $490 million of currency costs, we have another $120 million of must-pay O&M bills that we have not yet found a source of funds for, and essentially we face another problem in our military pay accounts where we have a $300 million bill that also accrues to the currency fluctuation. Essentially, we will have to look at all of our available accounts, and that will bring into bear our procurement accounts, primarily, as a source of funds.

TRANSFER AUTHORITY

General VUONO. Let me just say on that, Mr. Chairman, that, as I said in my opening statement, and as we repeated a couple of times, we simply need the help of this committee to assist us in that transfer authority. If we are concerned about the readiness of the force, not just the Army, then that transfer authority is absolutely essential in 1988, and I might add, we need it absolutely now. It does no good for us to get it at the end of the year. We need it now for the operating accounts.

General McCall. Sir, I know there is always a concern on this committee and others as to exactly what source of funds we would choose, and I would remind the committee that we will abide by all the standard reprogramming conventions, providing the committee full visibility to the reprogramming actions.

Senator Sasser. Gentlemen, thank you.

I have some questions here from Senator Byrd which will be included in the record, and we would request a timely response.

I thank you for your testimony this morning.

CONCLUDING REMARKS

Our distinguished and beloved chairman, Senator Stennis, has asked that I convey to you his best wishes. General Vuono, he congratulates you on your elevation to Chief of Staff, as do I, and Senator Stennis regrets that he could not be here for your first testimony before the Defense Appropriations Subcommittee today, but I am sure he will read it with interest.

Gentlemen, again I want to commend you for the diligent work that you have done in revamping your budget here in short order.

And speaking for one Senator, I will continue to do what I can to see that the Army gets its share out of these Defense budgets as they come down. I feel that the Army probably has not profited in a relative sense as much as the other services over the past few years, and I feel from the standpoint of our national defense we need to do what we can within our budgetary constraints to try to address what I think has been an imbalance.

Thank you for being here this morning.

SUBMITTED QUESTIONS

The additional questions referred to earlier in the hearing will be inserted at this point in the record.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

QUESTIONS SUBMITTED BY CHAIRMAN STENNIS

Reserve Component Readiness

QUESTION. Secretary Marsh, there appears to be a lot of disparity between the 1989 Operations and Maintenance budget for the Active Army and that for the Army Guard and Reserve. The Guard and Reserve make up half the Army's manpower, half its combat capability, and over 70 percent of its combat service support. Yet, of the Army's total O&M budget of $24.7 billion, only 2.6 billion or 11 percent is for the Guard and Reserve.

Clearly, the Guard and Reserve are a bargain. However, in amending the 1989 budget, it looks as though the Army took care of the Active Army at the expense of the Guard and Reserve. In 1989, the Active Army Budget will increase by $954 million, but, the Guard and Reserve are decreased $122 million! That's without considering the effects of inflation. Army operating tempos and flying hours were increased above 1988 levels, but the Guard and Reserve were reduced!

Given the cost effectiveness of the Guard and Reserve, shouldn't we be increasing, instead of decreasing their readiness?

ANSWER. The figures you cite are approximately accurate, however, they do not tell the whole story. In the Army there is a very strong view, both from the military and civilian leadership, that we must support Reserve Component Readiness. What has been done in the Army Guard and Reserve to make them full and ready partners in our force has been very significant. We have had a consistent ramping up of equipment and modernization programs that directly relate to the readiness of the Army Reserve Components. In the preparation of the budget, very careful consideration was given to Guard and Reserve concerns and we think the budget is responsive to the readiness program that we have laid out for them and provides a program they can be responsive to.

It is correct to say that Active Army OPTEMPO and flying hours were increased above 1988 levels. However, RC flying hour dollars also were increased above 1988 levels. The FY89 budget reflects a Reserve Component funding stream that is 10.8% of the Army total. This figure does not include over $1 billion worth of equipment procured for the RC.

QUESTION. Why did the Army decide to increase operating tempo for the Active but not the Guard/Reserve?

ANSWER. During the Fiscal Year (FY) 89 budget review, the Army reduced operating tempo for the Active forces and the Guard/Reserve to meet budget constraints. When additional funds become available, Guard and Reserve operating tempos were both increased at the same proportional rate as the Active Component. These increased operating tempo rates support the level of training resourced in recent years (FY 87 and 88) and maintain the level of spares and repair parts at a constant level.

QUESTION. The Army Guard and Reserve lost 26,100 planned end strength growth in the amended 1989 budget. 4,664 were full-time support positions.

Secretary Marsh, how will these reductions be made? Will they be taken across the board or will planned Guard/Reserve force structure growth be deferred? Which Guard/Reserve units won't be created?

ANSWER. The current plan is to absorb these reductions across the board within the total end strength of the Reserve Components. The adjusted Reserve Component end strength will support approximately 96% of the programmed force structure. End FY88 Active Guard and Reserve (AGR) full-time support meets only 65 percent of the requirement for the Army National Guard and 59 percent of the requirement for the Army Reserve. At present no force structure will be deferred or eliminated to reconcile this shortfall. However, analysis continues to determine the most prudent course of action.

COST EFFECTIVENESS OF GUARD AND RESERVE

QUESTION. Secretary Marsh, it appears the Army believes the pain of budget reductions should be shared between the Active Army and the Guard/Reserve. In fact, it appears the Army decided that the Guard/Reserve should assume more of the pain.

Given that the Guard and Reserve provide so much combat capability for a fraction of the cost, shouldn't we be adding personnel and funding to the Guard and Reserve? Wouldn't this maintain force structure and save funds at the same time?

ANSWER. It is true that the RC were cut in strength and in all appropriation, including MILCON - - as was the Active Army. Congress set the Army Guard and Reserve strength for FY89 at the FY88 level. At this time there is no planned cut in any reserve component force structure, current or programed. On the other hand, the active component took an immediate cut in end strength of 8600 personnel and is inactivating an existing brigade. In addition, the civilian work force which supports both active and Reserve Component forces was cut by approximately 12,000 personnel. It is clear the reserve components did not assume a disproportionate share of the pain in the budget reductions. A very delicate balance must be achieved in the Total Army between active and reserve components and between combat and combat support. Total Force combat to combat support ratios of our tactical (TO&E) forces for FY88 are as follows:

ACTIVE	NG	USAR	TOTAL ARMY
53/47%	70/30%	19/81%	52/48%

The AC force structure is the principal land force deterrent. The emphasis on combat is to capitalize on the deterrent value of the AC by maximizing forward deployed, early deploying, and quick reaction forces, while holding to a prudent level the essential sustaining support structure in the AC pending mobilization. The RC proportion of the Total Army is that which is fiscally and demographically supportable. The Total Army is reviewed biennially to assess management/design innovations to determine how best to meet our worldwide requirements. Additional RC missions are carefully reviewed for supportability (fiscal)/executability (recruit, train, deploy) before structure is added. In spite of our efforts to get the most of our resources, including the RC, the Total Army is still far short of what CINCs perceive to be required to hold risk at the minimum.The biennial Total Army review updates and adjusts the Total Force to continually refine the AC/RC mix.

GUARD AND RESERVE COMBAT STRENGTH

QUESTION. The Army's 1989 budget provides for scaling back growth in Guard and Reserve programs. Secretary Marsh, since operation and support costs for Guard and Reserve combat units are approximately one third an active unit, why not continue to increase Guard and Reserve strength to keep up total force combat strength?

ANSWER. The Guard and Reserve end strengths were leveled for FY88 and 89 by act of Congress. As a result of the internally directed reduction to the Active Army end strength of 8,600, the Reserve Component (RC) will increase its combat structure by one battalion.

We must maintain a delicate balance in our force structure that provides Active Component (AC) response to global commitments through forward deployed units and quick reaction forces. At the same time, we must maintain prudent essential sustaining support structure in the AC pending mobilization. Any additional RC missions must be carefully reviewed for supportability and executability before structure is added.

Increasing Role of Reserve Component

QUESTION. Mr. Marsh, in recent years, the strength of the selected Army Reserve Component has grown faster than Active Army strength. In fact, selected Reserve Component strength will soon exceed strength of the Active Army. How has this shift been reflected in the Army allocation of budget resources?

ANSWER. In 1987, Army Guard and Reserve funding represented 10.5% of the total Army budget. In 1989 Reserve Component (RC) funding represents 10.8% of the total Army budget. The FY89 budget shows almost $10B going to the Army Guard and Reserve. After considering direct support of the Active Army to the RC and the value of displaced and new equipment that flows to them, for which they do not budget, we actually estimate that as a minimum, $2 to $2.5B more goes to the RC for a total of 15% of the Army budget. This increase reflects the growing role of the Army Reserve Components. Since 1987, Reserve Component funding has increased by 5.8%, while Reserve Component strength has increased by 1.6%. We support increased readiness and funding for our Army Reserve Components.

QUESTION. General Vuono, according to the annual report of the Reserve Forces Policy Board (2 February 1988), the Army National Guard has a critical shortage of M113 vehicles and 5-ton cargo trucks and the Army Reserve has a critical shortage of tactical and support equipment. The report states that shortage of 5-ton trucks adversely impacts on routine training, equipping new force structures, maintenance and repair, and modernization. In last year's bill, we provided legislative relief for the National Guard to immediately go on contract, with prior year monies available from appropriations, for new 5-ton trucks. What is the current situation on contracting for 5-ton trucks and what other measures are being taken by the Army to alleviate these critical shortages?

ANSWER. The Army as a whole is short M113s, 5-ton trucks and communications/electronics systems. The Army ended procurement of M113s in FY87 in favor of buying Bradleys due to the unaffordability of buying both systems. As Bradleys are fielded in the Active Component the displaced M113s are on the "first to fight" basis. This results no M113s being available for distribution to the ARNG. ARNG has a contract for 300 M113s in FY88 as a result of dedicated procurement.

In the area of communications/electronics, we have several efforts under way to redistribute tactical FM radios, night vision goggles, modern radio antennas and TMDE to the USAR. Additionally, the Battlefield Communications Review II Program (BCR II) is helping units gain C-3 readiness via redistribution of tropospheric communications systems and TMDE to USAR signal units. We feel our redistribution efforts should ease the current shortages.

As you know, 5-ton trucks are another key shortage area in the Army. Initial Production Testing (IPT) has begun on our current 5 year multiyear contract for 5-ton trucks. Fielding deliveries are expected to begin in September/October of this year after successful completion of testing. Some of the vehicles from this contract will be fielded to National Guard and Reserve units. In addition there are sufficient contract options available on this contract to satisfy National Guard and/or Army Reserve procurements. Remaining Total Army shortages (approximately 15,000 trucks) will be fielded from the Family of Medium Tactical Vehicles which is scheduled to begin production in FY91.

ARMY RESERVE EQUIPMENT

QUESTION. Mr. Marsh, at the end of 1986, the Army Reserve had only 70 percent of its wartime equipment requirement on hand. This is 2 percent less than the end of 1985 when the Army Reserve had 72 percent of its wartime equipment requirement on hand. Also, the Army Reserves 70 percent equipment on hand rate is the lowest of any DOD Reserve Component element.

Please explain the reason for this unfavorable trend in equipment in the Army Reserve.

Please also explain why the Army Reserve ranks last in wartime equipment on-hand percentages.

ANSWER. The information quoted in the question is incorrect. The correct information is provided.

At the end of fiscal year (FY) 1985, the Army Reserve had 58 percent of its wartime equipment requirement on hand. At the end of FY 86 the percentage rose to 62 percent and by the end of FY 87 to 70 percent. This reflects a favorable trend regarding equipment on hand status. The percentages indicated were extracted from the FY 86/FY 87 Annual Report of the Reserve Forces Policy Board publication.

The Army Reserve ranks lower in the wartime equipment on hand percentage due to the nature of its mission.

The Army Reserve is comprised primarily of combat support/combat service support type units. These units generally deploy after combat forces so their priority for equipment is lower. These differences in equipment priority are consistent with Army's first to fight-first to equip policy.

AVIATION PROCUREMENT PLANS

QUESTION. Mr. Secretary, last year the Army planned to terminate production of Apache, Black Hawk and AHIP helicopter programs in the near term. Can you explain the current plans for these programs and why the change has occurred?

ANSWER. The Army's decision to terminate these production programs was based on constrained funding which required the Army to develop a balanced program, within a total force perspective, for the Fiscal Year 1988 budget. The quantity requirement for these helicopters remained unchanged.

As a result of a subsequent review of our total Army aviation capabilities, structure, and worldwide force requirements, the Army formulated and presented to OSD a Fiscal Year 1989 program, which formed the basis of a long-term modernization plan. The Fiscal Year 1989 program was approved and the Army has developed the long term plan and will present it to OSD during April 1988. Inherent to its successful implementation is OSD support for a level funding threshold of $3.50 billion, escalated, through the Program Objective Memorandum years.

The long term modernization plan continues production of the Apache, Black Hawk and AHIP helicopters.

AVIATION PROCUREMENT AFFORDABILITY

QUESTION. Mr. Secretary, considering that the funding for defense programs is lower than previously planned, how are these three production programs now affordable when they were not last year under more optimistic funding projections?

ANSWER. The affordability issue was resolved through OSD recognition that the Army could not modernize its aviation fleet with existing funding. OSD funded approximately $843.0 million of our Fiscal Year 1989 program to continue this effort will require long term commitment to level funding at $3.5 billion, escalated, for the Program Objective Memorandum years. The Aviation Modernization Plan, which includes this requirement for $3.5 billion escalated funding, goes before the Defense Acquisition Board this spring.

AVIATION PROCUREMENT R&D PROCUREMENT PLANS

QUESTION: Mr. Secretary, last year the Army proposed a research and procurement program for the new Light Helicopter Experimental (LHX) costing more than $60 billion for about 4,000 aircraft. Only limited research and development efforts were contemplated for the existing Apache and Black Hawk helicopters.

This year, major changes have occurred in the LHX program, and the Army is now considering major and expensive R&D efforts for multi-stage improvements to the Apaches and Black Hawks.

Can you explain the current R&D and procurement plan for the LHX and the R&D plans for the Apache and Black Hawk helicopters, and tell us why these changes occurred?

ANSWER: LHX R&D consists of Demonstration/Validation (DEM/VAL) and Full Scale Development (FSD). DEM/VAL is contemplated to be a competitive, 18 month effort with an emphasis on the Mission Equipment Package (MEP). After DEM/VAL, the Army will downselect to a single contractor or team for completion of a 63 month FSD program.

The Army plans to procure 2,096 LHX aircraft designed for the armed reconnaissance, attack and air-to-air roles. Initial operational capability of the LHX is scheduled for March 1996.

All Army aviation R&D resources, to include Apache and Black Hawk, will be intensively managed to maximize the return on the Army's R&D investment, especially in the area of MEPs. The Army will use a Mission Area Executive Council Steering Group (ESG) to manage MEP development. The ESG will meet quarterly to review MEP projects, place emphasis on coordination of near term warfighting upgrades with LHX MEP development, insure architectural consistency and transfer of applicable improvements developed by this and other avionics programs to all Army aviation assets, and insure application of LHX MEP to other aircraft (i.e., Apache, Black Hawk) for scheduled multi-stage improvement programs.

The refocus of the Army's aviation modernization strategy resulted from a review of Army warfighting requirements, the definition of priorities for the present and future Army aviation force, and application of known near and far term fiscal constraints. A result of this review is an affordable Army Aviation Modernization Plan that focuses and prioritizes the Army's on-going aviation modernization programs and defines a strategy to enhance current and develop future capabilities. This plan encompasses both research and development (R&D) and procurement activities.

AVIATION PROCUREMENT LONG RANGE PLANS

QUESTION. Mr. Secretary, what are your long range plans for R&D and total procurement of Apache, Black Hawk and AHIP? Is the Army proposing in the ongoing defense budget planning and programming process sufficient funding to provide full R&D and the minimum economic production rates for these programs until total program procurement is reached?

ANSWER. The Army will continue current production systems and periodically introduce modifications to these aircraft to protect our investments at a rate which is in consonance with the total Aviation Modernization program and within available funding. The Army has chosen to limit R&D funding to individual airframes in order to invest in a common-architecture mission equipment package which will have application to all airframes. The Light Helicopter (LHX) is the centerpiece of this strategy and is the Army's top research and development priority.

AVIATION PROCUREMENT

QUESTION. Mr. Secretary, in response to this Committee's direction, the Army is drafting an overall Aviation Modernization Plan which may contain some of the elements of the programs we already have discussed. What are the major issues being addressed in this plan, what is its status with respect to approval by the Secretary of Defense, and when will it be submitted to Congress?

ANSWER. The Aviation Modernization Plan focuses and prioritizes our ongoing aviation modernization programs and defines a strategy that enhances current capabilities as well as fulfills future hardware and organization requirements for the total Army's aviation forces. The major parts of this plan are:

- Continue current production systems. We will continue to procure AH-64s, UH-60s; rebuild OH-58 and CH-47 to the D model configuration.
- Limit modifications to current helicopters to protect our investment.
- Retire old systems no longer capable of surviving on the battlefield or defeating the threat.
- Continue research and development on new systems which allow us to field our best affordable technology in the LHX.

The plan will be presented to the Secretary of Defense this spring and, when approved, forwarded to Congress.

QUESTION. What changes would you expect to the funding and composition of the specific helicopter programs contained in the Army's FY89 budget request, and do you have any assurances from the Office of the Secretary of Defense that he will provide sufficient funding in the fiscal year 1990-94 period to implement fully the new aviation modernization plan?

ANSWER. The Army expects no changes from the Fiscal Year 1989 budget request, since the Fiscal Year 1989 program was developed through Defense guidance as the base year for the long range plan. The Office of the Secretary of Defense has indicated positive support for the program by approving the Fiscal Year 1989 base program and providing necessary funding to execute it.

ARMY R&D PROGRAM OVERVIEW

QUESTION. Mr. Secretary, although overall real growth in the Army's Budget this year is negative, R&D funding is projected to grow by a positive 3.9 percent in real terms--the largest real growth in R&D funding among all the services. What specific programs and initiatives account for this increase and how can each be specifically justified in this period of severe fiscal constraints?

ANSWER. The Army has made a conscious decision to pursue the efforts required to develop equipment which maintains or extends the margin of qualitative superiority over threat equipment. This requires investment in breakthrough technologies in the Technology Base as well as the application and testing of these technologies as they reach maturity and transition to production.

Specific programs which contribute to this real growth are listed below.

Title
Weapons and Munitions Technology
Military Engineering Technology
Advanced Anti-Tank Weapon System (AAWS)
Follow-on To Lance
Heavy Tactical Vehicles
Light Helicopter (LHX)
Force Enhancements (SOF)
Medium Surface-to-Air Missile (MSAM)
Kwajalein Missile Range
Productivity Investment

QUESTION. Mr. Secretary, I have been informed that the Army is drafting an overall Armor/Anti-Armor Modernization Plan to assess the cost effectiveness of its programs in this area and to make hard choices about which of these programs should continue to be changed. What are the major issues being addressed in this plan, what is its status with respect to approval by the Secretary of Defense, and when will it be submitted to Congress?

ANSWER. The Army is preparing an investment strategy which addresses our needs for Armor Anti-Armor systems in the FY90-94 timeframe. The primary issues of the Armor/Anti-Armor Modernization Plan are:

-Determine need to continue current tank, fighting vehicle, and tank killing munition production.

-Explore the need to retrofit basic M1 tanks with 120mm gun and associated costs.

-Examine best means and distribution of M1s to Reserve Components.

-Define limits to Mods to M60 series tanks.

-Define a process to continue to improve Anti-Armor Systems.

-Define an appropriate level of expenditure for the entire present and future Armor/Anti-Armor set of programs.

The Army anticipates that the A3 Modernization Plan will be implemented beginning with the FY90-91 President's Budget. Emerging results and elements of the plan as approved will be provided expeditiously.

QUESTION. What changes would you expect to the funding and composition of the specific Armor and Anti-Armor programs contained in the Army's FY 89 budget request, and how valid is this request now if an overall reassessment is underway?

ANSWER. The Army does not expect to request any changes to its FY 89 budget request as a result of the A3 Modernization Plan. The plan focuses primarily on our investment requirements during the period FY90-94.

QUESTION. Mr. Secretary, there are two major new program starts in the Army's FY89 budget request--a short-range, nuclear surface-to-surface missile to replace the Lance missile and an evolutionary surface-to-air missile (E-SAM) to replace the Hawk and Chaparral air defense systems. Both of these programs directly benefit our NATO allies, and yet there have been disagreements with our allies about the need now for a Lance follow-on, and about the technical requirements for the E-SAM.

Everyone agrees our NATO allies should spend more for defense. Why should U.S. taxpayers spend money in FY89 for these two programs until there is agreement with our NATO allies about the need for and composition of these efforts, and agreement for joint funding for both programs?

ANSWER. E-SAM, or MSAM (Medium Surface to Air Missile) as it is now called, is intended as a replacement for both Hawk and Chaparral. NATO nations have yet to agree on a NATO Staff Target (NST) for MSAM. In addition, the European members of NATO have been trying to develop a European position on MSAM requirements thru the Independent European Planning Group (IEPG). NATO is not expected to finalize its MSAM requirements documentation until after IEPG recommendations.

The US is currently reassessing its MSAM requirements in light of the fielding of a Patriot ATM capability, the Forward Area Air Defense System (FAADS), and qualitative improvements to the Hawk and Chaparral systems. The FY89 funds represent a small start to finalize and harmonize US requirements with the Europeans. The US will continue to work with NATO allies on the eventual development of an MSAM system, but a modular or incremental approach may be the only affordable alternative, with current systems remaining viable thru the year 2000. This approach would be beneficial to both the US and our NATO allies.

In regard to the Follow On To Lance (FOTL), agreement by our NATO allies was initially expressed in the 1983 Montebello Decision and has been reiterated since in sessions of the NATO Nuclear Planning Group at the Ministerial level. The FOTL is, and has been, a US-NATO agreed force goal. NATO support for the need to develop the FOTL, in light of the INF Treaty with the Soviet Union, has been characterized as urgent by SACEUR and our Allies. The potential for joint funding of the FOTL program will be appropriately addressed with our allies when the system is defined. MLRS is an attractive option as the launch platform for the FOTL because it is internationally co-produced venture with our NATO allies.

10-TON TRUCK PROCUREMENT

QUESTION. Secretary Marsh, last year the Congress provided $239 million to procure 10-ton heavy trucks. The Appropriations bill also provided authority for the Army to sign a two-year multiyear contract for these trucks. Noting the controversy surrounding this program last year, how does the Army intend to comply with the guidance provided by Congress?

ANSWER. The Army has requested the current HEMTT manufacturer to offer a 2-year multiyear contract proposal that would procure vehicles at a rate of $239.3M for both FY 88 and FY 89, as outlined in the FY 1988 Authorization Act. Contract options to this multiyear will be sufficient to procure the total authorized quantity of 4,737 vehicles.

LIGHT TACFIRE PROCUREMENT

QUESTION: Secretary Marsh, the Army was directed in last year's legislation to procure the Light TACFIRE system to automate fire support in the light divisions. The Committee has reviewed Mr. Carlucci's report explanning how the Army will execute this plan.

Can you explain the combination of Light TACFIRE equipment and other standard Army systems you have employed to accomplish this mission?

ANSWER: The Light TACFIRE (LTACFIRE) system designed for fielding to the light divisions provides an increase in field artillery capabilities over the current manual system. The LTACFIRE system is intended to be an interim system until the Advanced Field

Artillery Tactical Data System (AFATDS) can be fielded. The heart of the light division LTACFIRE system is the Briefcase Terminal (BCT). The BCT provides the light divisions with an introduction to the world of automation and provides limited processing power at selected nodes to program and schedule field artillery fires. At other key nodes in the light division structure, the Army will place the Fire Support Team Digital Message Device (FIST DMD) and the Forward Entry Device (FED or Digital Communications Terminal-DCT) to facilitate communications, store target lists/schedules and provide data entry points for fire mission processing. Both the FIST DMD and the FED have been purchased by the Army and do not contribute to the overall acquisition costs of the LTACFIRE system for light divisions.

The light division LTACFIRE system improves readiness, efficiently distributes processing and communication capabilities by utilizing equipment accepted by the 9th ID (MTZ) and other equipment already accepted by the Army. It requires no additional personnel or vehicles and supports field artillery doctrine. The light division LTACFIRE is a practical apporoach to automating selected field artillery functions in the light division until the total Army fire support automation requirements can be met with AFATDS.

M16A2 RIFLES COMPETITION

QUESTION. The Army is contemplating re-competing to gain a second source for the next contract on the M16A2 rifle that would buy out the remaining program requirements.

Mr. Secretary, why is the Army now, at this late point in the procurement program, competing the M16A2 rifle when it would appear that this is the buyout of the programmed Army requirements? Doesn't this entail a high risk of schedule delays and potential quality problems?

ANSWER. The Army is competing the M16A2 rifle not to obtain a second source but rather to obtain the best price and also to be in accordance with 10 U.S.C. 2304(C)(3) Industrial Mobilization.

As a minimum there are five program years of M16A2 rifles to procure for the US Army (FY88-92). The Army plans to award a five year multiyear to the winner of the competition. The full M16A2 requirement exceeds 450,000 rifles.

Since the competition is limited to those domestic firms who have manufactured military firearms having a bore of 40mm or less the risk of schedule delays and quality problems is considered to be low.

QUESTION. While supporting the Army's mobilization/surge base, the current supplier has already dual sourced many components and achieved full competition on all parts not restricted by the Army. Further, 80 percent of all subcontracts to Small and Minority firms. What assurances do we have that the re-competition will continue the necessary mobilization/surge base and how will the Army consider the interest of these Small and Minority business? What additional expansion of the supplier base can be expected from a second source at this time?

ANSWER. Any contractor awarded a contract for the M16A2 rifle will have to agree to become a mobilization base producer as a condition for award. In addition a surge requirement is included in the contract as well as the submittal of a detailed surge plan.

Any contractor considered for award of the M16A2 rifle will be required to submit for Government approval their Small Business Subcontracting Plan.

An expansion of the supplier base would be dependent upon the successful offerer.

M16A2 MOBILIZATION/SURGE REQUIREMENTS

QUESTION. The current supplier maintains their mobilization/surge requirements with international sales when the U.S. Government is not buying weapons. How can the new supplier maintain a mobilization/surge base under a similar situation if the current supplier has the exclusive right to sell overseas?

ANSWER: The M16A2 Technical Data Package (TDP) could not be used by contractors to produce rifles for commercial sales domestic or overseas. The license between Colt Firearms and the US Government does permit Foreign Military Sales (FMS) by the US Government. A new supplier could produce rifles pursuant to a contract with the US Government to satisfy FMS requirements which would help maintain a warm mobilization base.

If the new supplier's production base was to go cold, the contract requires maintenance of a mobilization base capability after production ends.

M16A2 CONTRACT/DELIVERIES

QUESTION. When does the Army intend to have this requirement on contract? How long does the Army expect will realistically be required before the first deliveries of weapons?

ANSWER. Current forecast is for award of a contract by 30 June 1988. The draft solicitation currently out to industry for comment requires a First Article Test report 390 days after contract award and first deliveries 590 days after contract award.

M16A2 START UP FEE

QUESTION. We are told that the current vendor's line will be gapped if an award is not received by August 1988. Will the Army have to pay a start-up fee if the current vendor's line is broken for a period of time due to the delay in the contract award? What is the amount of this fee?

ANSWER. A contract award is forecast for 30 Jun 88. Since the award will be made on a competitive basis as a firm fixed price contract, no start-up fee over the offered price would be paid to the current contractor if he was the successful offeror and experienced a production gap.

OPERATING TEMPO

QUESTION. Please provide an explanation of how readiness ratings (C1, C2, C3) relate to operating tempo. Quantitatively, how can the Army prove that 850 miles provides C1/C2 readiness and 725 miles provide C2/C3?

ANSWER. Ground OPTEMPO is a product of the Battalion Level Training Model (BLTM). The basis of the model is a training strategy which includes the frequency and duration of training events as well as vehicle density and miles traveled or hours operated on each event. The BLTM calculates the total days and number of miles/hours required to support the training strategy. Historically, the Army has used OPTEMPO to describe the training requirement. The level requested has been described through one system, the M1 tank, versus stating a number of levels resourced for each separate system. The level requested since 1985 has been 850 miles for the M1. At that level BLTM suggests most units would have sufficient resources to train at C1/C2 training readiness level. Readiness bands are used to describe potential decrement impacts because the relationship between resources and training readiness is not linear. If significant reductions to OPTEMPO were to occur, the BLTM suggests the majority of units would report a lesser degree of training readiness. For example, reducing OPTEMPO for an M1 tank battalion from 850 miles to 725 miles could cause the following changes in training strategy:

Events	Frequency at 850	Frequency at 725
Bn CPX/TEWT	3 per year	4 per year
Bn CFX	1	2
Bn FTX	3	2
Co CFX	1	2
Co FTX	3	2
Co LFX	2	1

CPX - Command Post Exercise
TEWT - Tactical Exercise without Troops
CFX - Command Field Exercise
FTX - Field Training Exercise
LFX - Live Fire Exercise

As shown, the commander must change from exercises with full unit participation to leader exercises. The impact on other types of battalions would be similar--fewer field training exercises especially at battalion and higher level and more leader/individual training. Because of the reduced events, the BLTM suggests the training readiness of the unit would be degraded to the C2/C3 band.

DEPOT MAINTENANCE WORKLOAD

QUESTION. Please provide the planned depot maintenance workload and backlog contained in the 1988 request (by type of end item or secondary items repaired/maintained) versus the 1988 program as contained in the 1989 budget. Which depot workloads have been reduced?

ANSWER. Provision of an item by item listing of end item and secondary items overhauled and repaired in the Army depot maintenance system would be prohibitively long and tedious. For example, in fiscal year 1987 we repaired in excess of 35,000 major end items of various types such as tanks, helicopters, and trucks and we repaired half a million secondary items such as aircraft engines and combat vehicle transmissions. We also performed renovation, modification, and other maintenance on about 44,000 tons of ammunition for tanks, artillery pieces, and missiles.

Expression as a cumulative dollar figure, as opposed to an item by item listing, provides a more comprehensive picture. The fiscal year 1988 President's Budget submitted a $1.548 billion funded program for Army depot maintenance; this recognized a backlog of $391 million. The amended budget submission for fiscal year 1988 requested $1.521 billion which recognizes a backlog of $311 million.

Fiscal year 1988 requirements have decreased $107 million from the original budget submission to the current amended budget primarily from reduction to the planned fiscal year 1988 Operating Tempo from 850 miles per year to 725 miles per year. Also, better reliability than anticipated on certain Force Modernization weapons systems has occurred. For example, no M1 tanks have qualified for a complete depot level overhaul in fiscal year 1988 although 10 were programmed in the original budget submission.

QUESTION. How has the Army used the $150 million Congress added for depot maintenance in 1988?

ANSWER. The Army applied the $150 million Congressional increase within Program 7 - Maintenance to "Other Depot Maintenance" which is the hardware rebuild portion of this subprogram. This application complies with the intent of Congress.

These funds were then partially offset by the following actions. $44.4 million of specified and unspecified Congressional reductions were applied to Program 7 - Maintenance including $21.8 million to "Other Depot Maintenance." The Congress directed the services to establish Program 11 - Special Operating Forces; $30.6 million of Program 7 Maintenance funds including $17.2 million of "Other Depot Maintenance" funds were transferred to Program 11 to be utilized for the same purpose as budgeted in Program 7-M. The Army was also required to absorb civilian pay raises; therefore, $21.7 million of "Other Depot Maintenance" funds were shifted to Program 7 Supply to reimburse the Army Industrial Fund personnel performing depot maintenance workload.

The FY 1988 Budget Authority and Outlay constraints has required the Army to absorb a number of operational bills within the OMA appropriation. Since FY 1988 is the Army's Year of Training, we have attempted to protect unit training and readiness. We examined the relative purchasing power of each of the OMA subprograms and found most of them in a negative buying power position for FY 1987.

Program 7 - Maintenance had positive growth. We determined that depot maintenance could be a billpayer and still equal the level requested in the President's Budget, which fully supported an OPTEMPO of 850 miles. In addition, depot maintenance would have a growth level higher than the OMA average, and would meet the Congressional intent on the size of the in-house workforce (60% of the work being accomplished in-house). Therefore, the Army has identified $103.0 million of Other Depot Maintenance funds for prior approval reprogramming to higher priority Army bills (CHAMPUS, NATO Budget Support & FINMIS). These actions are included in the revised FY 1988 column of the FY 1989 Amended Budget Submission.

ORGANIC VERSUS NON-ORGANIC DEPOT MAINTENANCE

QUESTION. How has the ratio of organic versus non-organic depot maintenance changed in 1986, 1987, and 1988?

ANSWER. For fiscal years 1986 and 1987 organic depot maintenance represents 63 percent and 59 percent of depot maintenance dollars expended; for fiscal year 1988 the percentage will be 63 percent. The in-house vs. contract depot maintenance ratio remains relatively stable at 60:40.

OPERATING TEMPO

QUESTION. How much funding migrated between base operations/real property maintenance and P-2 Mission funding during 1985, 1986 and 1987?

ANSWER. The following reflect funding which migrated from P-2 Mission to base operations/real property maintenance during Fiscal Years 1985, 1986, and 1987 ($ in Millions).

PROGRAM	FY85	FY86	FY87
P-2 Mission	-5.8	-119.3	-181.2

QUESTION: Please explain how the Army allocated, by command and by budget activity, the Congressional base operations support (-$271,300) and Japanese defense contribution (-$22,905) reductions made in 1988.

ANSWER: The Army distributed the Congressional base operations support (-$271.3 Million) and the Japanese defense contribution (-$22.9 Million) reductions by Budget Activity as follows:

($000)

BASE OPERATIONS SUPPORT		Japanese Defense Contributions
Budget Activity	Amount	Amount
2	-204,473	-21,944
3	-2,745	
7	-11,560	-364
8	-48,326	-536
9	-4,196	-61
TOTAL	-271,300	-22,905

The Base Operations Support reduction was made by reducing all of the program growth in the President's Budget and further reducing base operations support and utilities costs to meet the total needed. The program growth reductions were taken in accordance with the increases in the Budget. The additional reductions were distributed by programs based upon the lowest priority needs. Reductions were equitably allocated to commands based on their usage of the program reduced and the perceived ability of the command to absorb it.

The Japanese Defense Contribution reduction was made taking into consideration the perceived benefit of the contribution to the program. It was based upon the command's total obligation authority less the cost of Japanese indirect hires. This adjustment was made because of the additional reduction for the Japanese Base Labor Contract.

QUESTION. In the 1987 Supplemental, Congress added $37,500 for operating tempo, but operating tempo for tanks still fell below the goal of 850 miles per year. Why didn't the Army execute at 850 miles?

ANSWER. The Army began FY 87 at an OPTEMPO of 750 miles. In February 1987, the Army directed the field to plan training at the 850 rate in anticipation of the OPTEMPO funding contained in the Supplemental. In May 1987, the Army directed the field to execute training at the 850 mile level. When the funding for OPTEMPO contained within the Supplemental was provided to the Army in July 1987, it was distributed to the field in support of OPTEMPO. The Army ended FY 87 executing an OPTEMPO at an 850 mile rate but averaged an OPTEMPO of 800 miles in FY 87.

QUESTION. How much of the funding provided by Congress in the FY 1987 Supplemental was used to increase operating tempo? How much migrated to Base Operations and real property maintenance?

ANSWER. The entire $37,500,000 provided by Congress in the 1987 supplemental was used to increase operating tempo. The funds were distributed to commands based on the actual training events that could be completed and the associated increase in training intensity.

QUESTION. General Vuono, please provide the OPTEMPO and flying hours per month for 1986, 1987, 1988 and 1989 for all major combat vehicle and helicopter programs.

ANSWER. The following tables provide the Active Component, Army National Guard and Army Reserve data, to include the Individual Ready Reserve aviator flying hour program.

ACTIVE COMPONENT COMBAT MAJOR COMMANDS

	1986		1987		1988		1989	
ACFT	OPTEMPO	HRS/MONTH	OPTEMPO	HRS/MONTH	OPTEMPO	HRS/MONTH	OPTEMPO	HRS/MONTH
ATTACK	10.9	8118	11.8	8759	13.7	9681	14.0	11626
CARGO	12.6	3444	13.8	3593	12.0	3754	11.1	3635
OBSERVATION	11.8	14455	15.7	15344	14.9	16302	14.1	15977
UTILITY	16.1	25733	17.1	27839	15.6	26237	15.6	27037

Implementation of Program Budget Decision 731, which removes 350 UH-1 (utility) and 100 OH-58 (observation) aircraft, is in process. Data reflects the removal of 142 aircraft in FY89; remaining aircraft to be removed in 1988 and 1989 have not yet been determined. The average OPTEMPO will be approximately 14.5 in 1988 and 15.8 in 1989 when PBD 731 is implemented.

Data for 1986 and 1987 is for executed hours; 1988 and 1989 reflect resourced hours.

ARMY NATIONAL GUARD

	1986		1987		1988		1989	
ACFT	OPTEMPO	HRS/MONTH	OPTEMPO	HRS/MONTH	OPTEMPO	HRS/MONTH	OPTEMPO	HRS/MONTH
ATTACK	7.6	3222	8.8	3764	7.8	3638	6.8	3708
CARGO	4.3	1103	6.8	1055	7.0	371	6.9	500
OBSERVATION	5.9	6023	8.8	22025	6.7	7353	7.1	7757
UTILITY	11.2	14342	9.9	14987	8.3	13113	8.8	13862

1989 will be resourced at a higher level of OPTEMPO upon finalization of Army National Guard force structure.
ARMY RESERVE TROOP PROGRAM UNITS

	1986		1987		1988		1989	
ACFT	OPTEMPO	HRS/MONTH	OPTEMPO	HRS/MONTH	OPTEMPO	HRS/MONTH	OPTEMPO	HRS/MONTH
ATTACK	0	0	0	0	0	0	2.3	160
CARGO	2.6	140	5.6	389	6.1	358	4.4	333
OBSERVATION	5.2	572	5.2	564	7.6	618	4.9	834
UTILITY	9.2	4379	9.2	4739	8.4	5403	9.2	5571

ARMY RESERVE INDIVIDUAL READY RESERVE AVIATORS

	1986		1987		1988		1989	
ACFT	OPTEMPO	HRS/MONTH	OPTEMPO	HRS/MONTH	OPTEMPO	HRS/MONTH	OPTEMPO	HRS/MONTH
ATTACK	*	0	*	21	*	21	*	21
CARGO	*	0	*	0	*	0	*	0
OBSERVATION	*	10	*	34	*	108	*	108
UTILITY	*	246	*	453	*	798	*	798

* Individual Ready Reserve OPTEMPO is assumed to be 1.0 hour per month.

GROUND OPTEMPO

	ACTIVE					ARMY NATIONAL GUARD					ARMY RESERVE				
	FY86 PROGRAM	FY87 PROGRAM	FY87 ACTUAL	FY88 PROGRAM	FY89 PROGRAM	FY86 PROGRAM	FY87 PROGRAM	FY87 ACTUAL	FY88 PROGRAM	FY89 PROGRAM	FY86 PROGRAM	FY87 PROGRAM	FY87 ACTUAL	FY88 PROGRAM	FY89 PROGRAM
WHEELED TACTICAL VEHICLES															
HEMTT	2677	2580	na	2354	2758	1055	1016	na	800	800	*	*		640	750
HMMWV	3818	3680	na	3259	3807	1230	1186	na	932	932	801	772	na	746	875
5 TON TRUCK	1953	1882	na	1706	2000	703	678	na	540	540	458	441	na	426	500
CUCV	6146	5924	na	5369	6294	2074	1999	na	1593	1593	1350	1301	na	1386	1625
TANKS															
M60A3	830	800	810	725	850	233	225	228	225	225	195	188	387	188	213
M-1	831	801	**	725	850	233	225	**	225	225	*	*		*	*
M1A1	830	800	**	725	850	*	*		*	*	*	*		*	*
COMBAT VEHICLES															
M113	875	844	907	775	913	233	225	162	225	225	*	*		*	*
M-2/3	875	844	**	775	913	233	225	**	225	225	*	*		*	*
ARTILLERY															
M109	850	800	780	725	850	306	306	na		210	210	210	na	210	210
MLRS	830	800	**	725	850	*	*		*	225	*	*		*	*

GROUND EXECUTION DATA NOT COLLECTED FOR FY 86
FY 87 ACTUAL FROM INTERIM MATERIAL READINESS SUPPORT AGENCY (MRSA)
FLEET MANAGEMENT REPORT DATED DECEMBER 1987
FY 88 AND FY 89 REFLECT RESOURCE LEVELS
na = NOT YET AVAILABLE

(*) SYSTEM NOT FIELDED

(*) SYSTEM NOT FIELDED

** In order to calculate an average annual usage, the usage for each vehicle is determined by taking the difference in the last two odometer reading which are reported to MRSA. As a result, only those vehicles for which both 1987 and 1986 usage reports were received are used by MRSA in the preparation of actual milage. Systems which are being fielded, such as the M1, M1A1, MLRS, and M2, will not reflect an actual usage until the individual system has been in the unit for 12 months or or longer. A fielded system such as the M60A3 or M113 represents a more mature data base and is not skewed by the lack of first year data. Actual data for new systems, (M1 - 666 mi, M1A1 - 645 mi, MLRS - 239 miles ,and M2/M3 - 775 miles) is skewed to lower levels because of the statistical requirement mentioned above. Actual data is best reflected by the data collected for similar mature systems as shown above (M60A3 - 810 mi, M109 - 780 mi, and M113 - 907 mi)

OPERATING TEMPO

QUESTION. General Vuono, please provide a reconciliation of the 1988 flying hour request to the 1988 plan as contained in the 1988 budget (please provide this data by command).

ANSWER. The following table provides a reconciliation of the 1988 flying hour program as contained in the 1988 budget with the program established in 1987 during the President's Budget Submission.

RECONCILIATION OF FY88 FLYING HOUR REQUEST

	FY88 BUDGET REQUEST		FY88 CURRENT ESTIMATE		DIFFERENCE		
MACOM	HOURS	$(m)	HOURS	$(m)	HOURS	$(m)	EXPLANATION
FORSCOM			385708	69.8			FORSCOM, USARSO and SOCOM were combined in 1987 and identified separately in 1988. FORSCOM resourced USARSO and SOCOM at 100% of their requirement.
USARSO			23337	5.3			
SOCOM			31093	7.4			
	494596	92.6	440138	82.5	-54458	-10.1	Mission dollars reduced to meet $11M Congressional cut and to go from 15.8 to 14.5 average OPTEMPO.
USAREUR	240755	41.7	210468	35.1	-30287	-6.6	Mission dollars reduced to meet $11M Congressional cut and to go from 15.8 to 14.5 average OPTEMPO.
WESTCOM	23809	4.4	19569	4.0	-4240	-0.4	Mission dollars reduced to meet $11M Congressional cut and to go from 15.8 to 14.5 average OPTEMPO.
EUSA	74133	15.6	72276	15.3	-1857	-0.3	Mission dollars reduced to meet $11M Congressional cut and to go from 15.8 to 14.5 average OPTEMPO.
USAJ	2270	0.3	3100	0.4	830	0.1	Additional UH-1 missions.
INSCOM	13596	1.9	16036	2.2	2440	0.3	Additional OV/RV missions.
USAISC	3180	0.3	3070	0.2	-110	-0.1	Adjust U-21 hours to meet contractor logistical support (CLS) requirements.
ARNG	357953	52.3	358370	53.0	417	0.7	Adjust hours for CLS and mission requirements.
USAR	95943	14.5	95943	14.5	0	0.0	
TRADOC	500773	73.6	498905	73.6	-1868	0.0	Adjust hours for CLS and training base requirements.
AMC	19373	1.7	13075	1.2	-6298	-0.5	Adjust hours for mission requirements.
HSC	2100	0.3	2100	0.3	0	0.0	
USMA	1560	0.1	1570	0.1	10	0.0	Adjust hours for CLS requirements.
USADAC (MDW)	14100	1.3	14740	2.1	640	0.8	Adjust hours for CLS and mission requirements.
USASC	1200	0.04	1200	0.04	0	0.0	
HQLSE	2000	0.1	2000	0.1	0	0.0	
COE	1200	0	1200	0	0	0.0	
TOTAL	1849241	301.4	1753760	284.6	-95481	-16.8	Shows total Congressional reduction and other adjustments.
Aviation Force Structure Reduction			-15227	-1.8			Dollars and hours to be adjusted in accord with Program Budget Decision 731.
Amended Budget Position			1738533	282.8			OPTEMPO for Amended Budget Position estimated to be 14.5.

QUESTION. General Vuono, please provide the number of aircraft and the flying hour cost per hour by type of aircraft in the 1989 budget.

ANSWER. The table below provides the FY89 aircraft quantities and cost per hour by type of aircraft.

FY89 AIRCRAFT NUMBERS AND FLYING HOUR COST BY TYPE AIRCRAFT

TYPE	NUMBER	FLYING HOUR COST
AH-1S	1095	205
AH-64	391	413
CH-47A-C	138	707
CH-47D	299	536
CH-54	71	693
OH-6	403	105
OH-58A-C	1708	102
OH-58D	113	98
UH-1H	3031	130
UH-1M	124	130
UH-60	961	268
C-12	114	45
C-20	3	1300
OV/RV-1	123	299
RC-12	22	44
RU-21	29	57
T-42	54	67
U-8	52	92
U-21	107	46
UV-18	7	135

Data reflects 273 aircraft, to date, that have been identified for retirement as part of the 450 total mandated by Program Budget Decision 731. Upon identification of the remaining 177 aircraft, the program will be readjusted.

QUESTION. The Army's budget calls for a 3 percent reduction in civilian personnel. Please explain programmatically how the Army will implement these reductions. How many work years are associated with this change? Please provide a status report on reaching the goal of a 11,690 reduction in 1988?

ANSWER. MACOMS are currently evaluating the impact of a three percent reduction on installation level activities, and commanders have only recently received their revised FY 88 funding levels.

Based on current program data, the functional areas considered to be the most affected are:

a. Real Property Maintenance
b. Base Operations
c. Training Support
d. Logistics Support
e. Europe - MTOE Unit Support
f. Information Management
g. POMCUS Support
h. Family/Community Programs
i. Army Food Service Program

Field commanders have available the following means to curtail personnel expenditures: reductions in travel, overtime, and other discretionary costs; hiring freezes; release of non-critical temporary employees; early retirements (require Office of Personnel Management approval); furlough and reductions in force (RIF). Considering the disruptive effect of a reduction of this order, less severe options should be exhausted before considering RIF and furlough actions.

A corresponding reduction of 2510 workyears is associated with the strength reduction.

Current status of civilian strength is 409,134 in February 1988, down 8755 from the FY 87 strength total of 417,889.

APACHE HELICOPTERS

QUESTION. The Army has proposed $809.1 million to purchase 72 Apache helicopters in FY 89. Please explain the assumptions which will validate this estimate. If $809.1 million is insufficient, what factors were used to generate this estimate and why is it inaccurate? Why is $90 million available to develop an upgraded Apache when funds are not sufficient to produce the minimum economic production rate?

ANSWER. The $809.1 million request for 72 APACHE's contained in the President's Fiscal Year 1989 budget is based upon the assumption that the Army can negotiate the same production unit cost for the reduced production rate of six per month as that previously negotiated for a rate of ten per month. The Army accepts this challenge and will conduct detailed negotiations with the intent to procure 72 APACHE's for the available budget.

The $90 million RDTE funding is required to apply improvements to the APACHE required to meet an expanded threat, reduce O&S costs and improve fighting capability for the 1995-2005 time period. The RDTE funding is for a generational improvement and is not associated with the near term APACHE production rate.

QUESTION. In FY 87, the manufacturer proposed a multi-year procurement for Apache helicopters. What factors in current plans would make that proposal impractical, cost ineffective, or unaffordable?

ANSWER. The multiyear proposal submitted by McDonnell Douglas Helicopter Company (MDHC) in Fiscal Year 1987 did not provide sufficient savings over single-year proposals to meet the Congressional criteria for approval of a multiyear contract. The Army is re-exploring with MDHC and Martin Marietta Orlando Aerospace the possibility of multiyear contracting for APACHE and Target Acquisition Designation Sight/Pilot Night Vision Sensor commencing with a Fiscal Year 1990 procurement to establish its feasibility and cost savings.

QUESTION. In FY 88 the Congress provided $811 million to purchase 77 Apache helicopters. I understand the manufacturer proposed an option to the previous plan to purchase 67 helicopters, adding the extra 10 helicopters for the same unit price. Is this information correct? If not, please explain the proposal received regarding the FY 88 procurement. If correct, why did the Army reject this offer?

ANSWER. The information is not correct. Prior to definitization of the Fiscal Year 1988 option of the Fiscal Year 1986 contract, the Army queried the manufacturer regarding adding options for several quantities of additional helicopters (including ten) at the same unit price. The manufacturer refused to quote the same unit price, citing the need to increase his material prices by five to ten percent. Due to the manufacturer's refusal to agree to an option extension, the Army could only buy 67 aircraft.

QUESTION. What are the cost or savings associated with the Army's decision to award the last ten aircraft in a separate contract? Please explain the response delineating the costs by contract.

ANSWER. The Army does not intend to award the last ten Fiscal Year 1988 aircraft as a separate contract. The Fiscal Year 1988 contract will be modified to add the ten aircraft. This modification will be priced and negotiated in conjunction with the Fiscal Year 1989 procurement of 72 aircraft. Negotiating these ten aircraft with the Fiscal Year 1989 buy is expected to provide a favorable unit cost at an estimated production rate of six per month.

ARMY HELICOPTER IMPROVEMENT PROGRAM (AHIP)

Question. In 1987, the Army converted several AHIP aircraft to an Armed AHIP configuration. Please explain the legal authority used to provide funding for this effort.

Answer. In August of 1987, the Army was tasked to provide certain helicopter capabilities. The OH-58D helicopter was selected to perform this assignment. Funds in the FY 1988 OH-58 observation helicopter modification budget line ($21.8 million) were used to arm the OH-58.

The Army has reprogramed $9.9 million back into this line to reconstitute a portion of the Air-to-Air-Stinger (ATAS) program for OH-58 aircraft which was reduced to provide these modifications. This below-threshold reprograming will appear in the next report of programs (DD 1416) report. Any ATAS program deferred by the armed configuration modifications will be reinstated in future years because the ATAS program is a continuing effort by the Army.

The guidance at page 553 of the Conference Report on the FY 1988 appropriation concerning limitations on OH-58 modifications was received well after contracts for the modification had been awarded. We feel the funding and reprograming actions taken in this matter were and are proper.

The Appropriation and Armed Services Comittees were briefed on this matter 5 thru 16 November 1987. Formal letters were dispatched to the HAC and SAC on 23 December 1987, and an update letter was dispatched on 8 February 1988.

QUESTION. What are the current plans and amounts requested to modify OH-58C helicopters into the AH-58D or Armed AHIP configuration? Does the Army have any plans to modify additional AHIP helicopters into an armed configuration?

ANSWER. At the present time we have no funds in the Fiscal Year 1989 budget to procure any more armed OH-58D's beyond the arming of the OH-58D with the Air-to-Air Stinger. If a decision is made to continue to buy kits which would permit HELLFIRE, 50 caliber machine guns or 2.75 inch rockets to be added to the aircraft, they would appear in the Aviation Modernization Program that you would see in the FY 90-91 Budget.

MANPOWER REDUCTIONS

QUESTION. For the first time in the 1980's the Department of Defense has directed the Army to reduce active duty manpower to meet budget reduction requirements. Though calling for a reduction of only about 8,000 personnel, the FY 88 budget request will bring Army manpower to its lowest level since 1979. Given that significant budget constraints may well continue, or even tighten further, in the next several years, is the Army anticipating the need for additional manpower reductions? What are the criteria used to determine which units or categories of personnel are to be reduced?

ANSWER. We do not believe the Army should be reduced further in size. Given the fact that our strategy has not changed; that the threats to our vital interests around the world continue to grow in size, complexity and sophistication; and that the burden of deterrence is increasingly shifting to conventional Army ground forces; the level of risk associated with our small force structure is already high. Further reductions could well push us beyond the point where even our best affordable quality would be unable to secure deterrence because of inadequate size.

The criteria we use when reducing or eliminating units or categories of personnel is based on an assessment of the threat and associated risks. From the standpoints of deterrence and warfighting, the forward deployed forces in Europe and Korea would be protected from cutbacks since they provide the most visible peacetime deterrence capability and would be quickly available in any conflict. When reductions must be taken, units and/or personnel with the least impact on U.S. defense priorities would be selected. Consideration is given to the threat and the Army's ability to meet the requirements of the unified and specified commanders-in-chief in line with NCA and JCS priorities under the National Military Strategy. Any reduction in conventional ground forces would have to be balanced with the corresponding reduction in the sustaining base.

ARMY NBCRS PROGRAM

QUESTION. The Army has concluded that "one vehicle meets the requirements throughout the depths of the battlefield." Since the selected vehicle (the Fuchs) has wheels, this implies that tracked vehicles are not necessary. Does this implication apply to all potential battlefields throughout the world?

ANSWER. Yes. For the specific mission as an NBC Reconnaissance System, tracked armored vehicles are not necessary for all potential battlefields throughout the world. The NBCRS Required Operational Capability allows either a wheeled or tracked armored chassis capable of mobility and performance to support the Bradley/M113 equipped force. The Fuchs has demonstrated that capability.

QUESTION. What test data is available on the fully operational FUCHS NBCRS vehicle and a fully operational XM87? How do they compare in mission performance?

ANSWER. There are no fully operational XM87 vehicles. The Army development program has not proceeded to this point.

The Army conducted a Concept Evaluation Program (CEP) of an RDTE conceptual model XM87 and a mature Fuchs in April-May 1986. The data from that test is available.

In the CEP both systems demonstrated a significant improvement over currently fielded methods of NBC Reconnaissance in that they were mobile, had the capability to automatically detect and quantify simulated chemical agents, and could communicate the findings. The navigation systems exceeded test criteria for accuracy. The FUCHS required the operator to gather the data from both the radiac detector and mass spectrometer agent detector and transmit the report orally by radio in contrast to the XM87's digital communications system. A preplanned product improvement program will automate data processing and add digital communications to the FUCHS. The XM87 experienced difficulty sustaining operations cross-country in rugged terrain, particularly in muddy conditions, due to mud buildup on the external chemical sensor equipment. The sampling arms on the XM87 were easily bent became misaligned with the mass spectrometer probe face during operations in rugged terrain.

QUESTION. What operational tests are planned for the FUCHS? For the completed XM87? When will these test results be available?

ANSWER. The Army intends to conduct a preplanned product improvement (P3I) program for the FUCHS. This P3I program will include operational testing. These tests results should be available in FY91 prior to the Army making a decision to procure P3I versions of the Fuchs which is planned to begin in FY 92.

No operational tests are planned for the XM87.

QUESTION. What is the projected unit production price, including chassis and equipment of the Fuchs and XM87? What are the total life cycle costs of both?

ANSWER. Projected Unit Price

FUCHS (P3I) - $1.17M (Based upon 1.6 DM per Dollar)
FUCHS (as is now) - $1.08M (@1.6 DM per Dollar)
XM87 - $0.83M (Does not include cost of M113. Does include cost of depot refurbishment of M113 chassis. Cost would be $0.974M if cost of new M113 chassis was included.)

Total life cycle costs for each system are not yet available. Preliminary estimates indicate the total life cycle costs for FUCHS to be somewhat less than that for the XM87 tracked and wheeled NBC reconnaissance vehicles originally planned in the Army program.

QUESTION. Since the Fuchs is significantly different from the M113, how long will it take to redesign the vehicle-specific technology of the XM87 to accomplish the "product improved" version of the Fuchs vehicle?

ANSWER. Redesign of the vehicle specific technology developed for the XM87 into the preplanned product improvement version of the FUCHS vehicle is estimated to take three years.

QUESTION. Will the PIP program be a competitive award? Will U.S. companies be allowed to compete?

ANSWER. Yes.

QUESTION. Who will conduct the procurement for the PIP to the Fuchs vehicle (i.e., U.S. Government, FRG, or ??)?

ANSWER. The procurement action will be conducted by the U.S. Army. This could change if a Memorandum of Understanding is developed with the

German Government for joint development of the improved system. At that time the procurement plans would be reviewed and modified in accordance with regulations.

QUESTION. Which procurement rules will govern this award (U.S. or International or FRG)?; whose acceptance criteria will be utilized?
ANSWER. Assuming no change based on a MOU, U.S. procurement regulations will govern this award. German acceptance criteria will be used for the inital procurement of "as is" FUCHS systems. Acceptance criteria in accordance with U.S. guidelines will be developed for the follow-on preplanned product improvement version.

QUESTION. Is the technical data package characterizing the Fuchs vehicle sufficiently complete and accurate to allow the product improvement to be done by someone other than Thyssen-Henschell? Has this package been "validated" by the Army?
ANSWER. The Army does not have the Technical Data Package for the currently fielded German Fuchs to assess its adequacy. The package has not been "validated" by the Army.

QUESTION. Who owns the rights to the technical data package?
ANSWER. Damler Benz, FRG, owns the technical data package.

QUESTION. Will these rights be acquired by the U.S. Army? What costs are involved?
ANSWER. The Army is interested in obtaining the rights to selected portions of the Fuchs technical data package which will permit competitive procurement of the preplanned product improvement version of the FUCHS. Costs are not known. Negotiations have not yet begun.

QUESTION. Will these rights be transferred to industrial participants who would bid on PIP programs? Will there be any costs to U.S. participants who would bid on PIP programs? Will there be any costs to U.S. industrial participants to acquire this data?
ANSWER. Data rights obtained for the systems will belong to the U.S. Government. Industry will be able to use these rights. No costs to U.S. industry to acquire this data are planned.

QUESTION. The Product Improved Fuchs will be a U.S. -German hybrid system. Who will provide the technical data package and maintenance of the complete system? Who will maintain configuration control of the complete system?
ANSWER. Under the preplanned product improvement program, the Army will acquire the technical data package for the systems going into the vehicle under contract. Maintenance of the complete system will be under U.S. Army logistics control. Plans for configuration control are being developed..

QUESTION. Will spare parts originate in Germany or will they be in the U.S. logistics system? What will be the maintenance philosophy outside of Europe?
ANSWER. It is anticipated that spare parts will be put into the U.S./NATO system. Maintenance philosophy for the preplanned product improved FUCHS is 100% U.S. Army logistics and maintenance. The extent of depot and intermediate rear area maintenance is not yet determined.

QUESTION. Compare and contrast the two vehicles with respect to air and sea lift requirements and constraints. What is the deployment and basing plan? How will the vehicles be moved into contingency areas?

ANSWER. The NBCRS must be air transportable by the C-5 aircraft and be water transportable by the LACV-30 and all larger water vessels. Both vehicles meet this criteria. The NBCRS will be fielded to chemical companies worldwide, and for those units with vehicles in NATO POMCUS sets, the NBCRS will be prepositioned. The NBCRS will deploy to contingency areas and be transported by the same means as the units that it supports.

Questions Submitted by Senator Byrd

MANPOWER REDUCTIONS

QUESTION. Retiring Under Secretary of the Army James Ambrose stated that if zero-growth budgets continue he would prefer personnel reductions of more than 100,000 rather than cuts in weapons modernization programs. (*Washington Post*, February 11, 1988, p.4). Do you share this viewpoint? If active duty manpower continues to be reduced, will there be an increased emphasis upon the training and equipping of the Reserves and National Guard?

ANSWER. The 8,600 active military strength reduction in FY89 will place the active Army at its lowest manpower level since 1979. In the future, we must guard against reducing an already small Army to levels where reductions in size cannot be overcome by mobilization and even our best quality is unable to satisfy the nation's needs for ground combat power. We must take care to maintain a force sufficiently large enough to deter potential threats. Weapons and equipment alone are not the heart of the Army's warfighting capacity; quality soldiers in well-trained, well-equipped units are. We cannot buy real readiness even by superbly equipping an insufficient or inadequately postured force. We must not forget that to afford modernization, we already have mandated a small force. To make it smaller still, without a commensurate reduction in threat, is not advisable.

If, however, active duty manpower must be further reduced, the Reserve Components would be considered for additional missions. Recognize however that in this FY89 Amended Budget we also had to forego a needed growth in Reserve Component strength of some 26,000, rather than increase their strength to off-set the lost 8,600 active personnel. Emphasis in training and equipping of the Reserve Components continues to be a priority responsibility o the Total Force.

Question. Among the units that will bear the brunt of the manpower reductions are the 9th Infantry Division (Motorized) and the 6th Infantry Division (Light). These units are both new types of divisions, which the Army developed to meet what it felt to be the most likely military threat to U.S. security--low and mid-intensity conflicts. Why were these two divisions selected for personnel reductions? Is not the 9th Infantry Division a major element of the Central Command designed for operations in the Persian Gulf area? If so, will its reduction adversely affect the Army's capability to respond to military contingencies in this region?

Answer. Army examined impact of budget cuts, equipment shortages and officer reductions in light of warfighting capability and concluded that Army could not absorb further degradation without affecting force structure. Although the Army did not want to cut force structure, budget cuts caused an imbalance in modernization, readiness and sustainment capabilities.

Units were assessed to determine which would have the least effect on warfighting capability and Army's ability to meet the nation's strategic committments. The least risk options were:

a. Not activating two programmed battalions of 6th ID(L).

b. Inactivating one brigade of 9th ID(MTZ) and rounding out the division with an RC brigade.

Reduction of units organic to these divisions will have an adverse impact on the Army's ability to respond to military contingencies in the areas of the world designated to receive forces from the 9th and 6th Divisions and the roundout units to be provided to the 9th. Roundout forces will provide needed capability to assure mission accomplishment but the total Army is reduced, in the aggregate, by the forces inactivated.

AIRLAND BATTLE - C3 SYSTEMS

QUESTION. In the last eight years the Army developed a new combat doctrine called AirLand Battle, predicated upon the increased and continuing modernization of its equipment. This modernization includes not only weapons systems, but greatly improved command, control, and communications (C3) systems vital to the successful execution of the AirLand Battle. Has the deployment of C3 systems kept pace with the introduction of other AirLand Battle systems such as the Ml tank and Bradley Fighting Vehicles? Will the current budget reductions adversely effect deployment of C3 systems, and thereby jeopardize the Army's ability to execute its AirLand Battle doctrine?

ANSWER. Since the Army embarked on its modernization program in the early 80's, the deployment of command, control, and communications (C3) has not keep pace with the modernized weapons systems designed to execute the AirLand Battle doctrine against the projected threat. Initially, the Army focused its resources on deploying enhanced weapons systems such as the Ml tank and Bradley Fighting Vehicle, along with other high cost programs such as the Apache helicopter, Multiple Launch Rocket System, and the Patriot air defense system. C3 systems were not developed at the same pace, not only because of the available resources to commit, but because of a lag in technology required to field effective, automated C3 systems.

Within the last several years, the Army has refocused its efforts on fielding C3 systems as evidenced by its budget submissions. It has worked hard at developing a "system-of-systems" which provides integrated command and control (C2) nodes at each battlefield functional area, with connectivity provided by reliable, high speed, communications. One of these communications systems, the Mobile Subscriber Equipment (MSE) system, has been a complete success story because of the level of support it received. The Single Channel Ground Airborne Radio System (SINCGARS), also having received support, is showing similar promise.

Reductions in the budget will seriously impact on the Army's ability to continue its planned force modernization. Managing the C3 program as a "system-of-systems" requires aligning individual programs to battlefield weapons systems by carefully developing deployment schedules. Because of reduced funding levels, the Army has internally reprogramed to ensure continued, coordinated fielding between C3 and related weapons systems, at the expense of other priority programs. Reductions in budgeted C3 funding will result in either delaying programs, fielding less than optimum systems, or disestablishing programs.

Army Development and Employment Agency

QUESTION. The Army Development and Employment Agency (ADEA) was created to test and evaluate readily available "off-the-shelf" equipment that could be inexpensively modified for military use. The intent was to try to reduce the costs and time usually required to develop and field new equipment. The Army has now decided to terminate this agency. Given foreseeable budget constraints, it would seem the Army should be more interested than ever in exploring the potential of equipment already available in the commercial market place--thereby possibly reducing its research and development costs. What considerations led to the termination of ADEA? Are the ADEA's responsibilities being transferred to other organizations? If not, has the Army found the exploitation of "off-the-shelf" technology to be an unrewarding approach to filling its equipment needs?

ANSWER. Faced with significant fiscal and force structure reductions, areas that could prudently be reduced while providing the capability through other means were assessed. The inherent missions and capacities of the Training and Doctrine Command (TRADOC) and the Army Materiel Command (AMC) ensure that the capability provided by ADEA will continue. Although the fiscal environment forcing the reduction (Army Tactical Command and Control System Experimentation Site (AES) will remain) of ADEA is regrettable, the exploration of the commercial market for application to Army needs has been found to be very productive and is a continuing effort of AMC. Through their Deputy Chief of Staff for Technology, Planning and Management, the Technical Base Investment Strategy is developed and executed. The strategy is to continually search for and analyze products and technological advances of industry to fill Army needs. The strategy is reviewed semi-annually by the Technical Base Advisory Group (TBAG), which is comprised of the Technical Directors of all the Army's Laboratories and Research Centers. Another initiative is the AMC Field Assistance in Science and Technology (FAST) program. Thru their Scientific Advisors, field commanders can tap directly into the Army's laboratory system to seek concept formulation, testing and acceleration of new technologies to meet operational requirements.

QUESTIONS SUBMITTED BY SENATOR DECONCINI

APACHE HELICOPTER

QUESTION. In reviewing the AH-64 Apache procurement record for FY 82-87, I note that in four of the six years the Army actually bought less than the quantities of aircraft authorized and appropriated by the Congress. Since the Army has stated that the minimum economic production rate for the aircraft is six per month, I believe that it is important that 72 aircraft be procured in FY 89. Are sufficient funds included in the FY 89 budget to procure the quantity of 72 aircraft as requested? How much are you estimating each Apache to cost?

ANSWER. The $809.1 million request for 72 APACHE's contained in the President's Fiscal Year 1989 budget is based upon the assumption that the Army can negotiate the same production unit cost for the reduced production rate of six per month as that previously negotiated for a rate of ten per month. The Army accepts this challenge and will conduct detailed negotiations with the intent to procure 72 APACHE's for the available budget.

At the President's Fiscal Year 1989 budget request, the Procurement Unit Cost of each APACHE is $12.40 million.

CONVENTIONAL FORCE ENHANCEMENT

QUESTION. With a possible signing of the INF Treaty later this year, there is a general recommendation that our conventional forces need to be enhanced. General Galvin, our senior military commander in Europe, listed the Apache as one of the five key weapons systems essential to conventional force effectiveness. Therefore, I find it difficult to reconcile these facts with the Army's recent decision to reduce the total number of Apaches from 1,031 to 863 which in part results in 42 less Apaches allocated to Europe. This does not make sense to this Senator given the gross disparity in helicopters, tanks and artillery between the Warsaw Pact and NATO. Perhaps, there are other factors involved. Please explain.

ANSWER. The decision to reduce the number of Apaches in an attack battalion from 18 to 15 was based primarily on budgetary reasons. In order to modernize Army aviation in all areas (attack, lift, scout and cargo) and stay within agreed Army/OSD budget projections ($3.5B annually for aviation) some hard decisions had to be made. A reduced rate of acquisition for the Apache was one concession. However, the aggregate decisions of the Army modernization plan have resulted in a 15 Apache/10 LHX organization which is considered to be a more capable combat organization than the previous 18 Apache/13 non-armed OH-58 unit. This change is justified in that 10 additional "shooters" LHX will be added to the attack battalion. Each of these aircraft designate for, carry and fire the laser guided anti-tank Hellfire missile. This increase in "shooters" gives the commander an increased missile carrying capability as with 18 Apaches but adds flexibility for reconnaissance target designation, engagement and employment. With the increased capability, the Army's requirements for AH-64 would be satisfied with the procurement of 863 airframes as opposed to the original 1031. You must recall that this is not an Apache reduction. The Army's previous program procured only 593 of the original 675 we planned to buy. We are in fact increasing the Apache buy.

LHX

QUESTION. A memorandum dated February 25, 1988 signed by the Under Secretary of the Army, James Ambrose, reflects new goals and objectives of the refocused LHX program. Can you please explain how the LHX helicopter program has been restructured. Has this transport version of the LHX been canceled or is the Army reserving the option of requiring it at a later date? How much will the restructured program cost? And how much is being saved? Is the Army finally firmly behind this program?

ANSWER. The LHX has been restructured to satisfy the essential requirements and to comply with program direction from the Office of the Secretary of Defense in a 20 January 1988 Acquisition Decision Memorandum. LHX now focuses on the armed reconnaissance, attack and air-to-air roles. This significantly decreases aircraft empty weight to 7,500 pounds. The majority of LHX program restructuring is encompassed within its development and acquisition strategy.

	PREVIOUS	CURRENT
DEMONSTRATION/VALIDATION		
Schedule (MONTHS)	56	18
Cost (FY88 $ IN BILLIONS)	2.86	.37
Flying Prototypes	YES	NO
FULL SCALE DEVELOPMENT		
Schedule (MONTHS)	38	63
Cost (FY88 $ IN BILLIONS)	2.03	2.36
Assault Variant	YES	NO
PRODUCTION		
Quantity		
Scout/Attack	2004	2096
Assault	2164	NONE
Initial Operational Capability	DEC 97	MAR 96
Production Rate (PER YEAR)	480	216
Unit Flyaway Cost (FY88 $ IN MILLIONS)	9.6	7.0-8.0

Due to affordability reasons, there will be no utility version of the LHX at this time. This does not negate an Army standing requirement for a small, survivable, utility aircraft.

The restructured program will cost $35 billion (FY88 $). This includes both research and development and procurement costs.

The LHX program is projected to cost $30 billion less than the previous LHX program submitted as part of the FY88/FY89 Presidents Budget.

Army leadership is firmly behind the LHX program. It is the Army's top priority R&D program.

ARMY HELICOPTER RETIREMENT

QUESTION. The FY89 budget proposes the retirement of 620 Army helicopters. Are these being retired solely for budgetary reasons and will they be sold abroad? Additionally, do you intend to sell the Apache to countries such as Israel, South Korea and West Germany?

ANSWER. The US Army plans to eliminate 450 helicopters in FY 88 from the active component, and an additional 170 helicopters in FY 89 from active and reserve components. A total retirement of 800 airframes in those two years consists of eliminations (620), realignments or downsizing prior to receipt of more capable replacement (180) when new aircraft are available. Retirements will be partially offset by new procurements. The US Army is currently investigating several alternatives for the disposition of the retiring helicopters, to include Foreign Military Sales (FMS). The FMS sale of new AH-64A Apache helicopters to our allies is evaluated on a case-by-case basis.

ENGINE COMPETITION

Question. As a part of the Army modernization plan, I understand that you are conducting a competition for the engines in the Army Black Hawk and Navy Sea Hawk. Will there be cost savings associated with this competition? Will you select one winner? Will the Navy use the same winner selected by the Army?

Answer. The Army and the Navy are conducting a joint Competitive Engine Program to procure a fully qualified, production engine for use in Army and Navy H-60 series helicopters. A competitive, 5 year multiyear (FY89-FY93), fixed price contract is proposed. This multiyear program should save $50.3 million over the cost of single year contracts. The source selection process will pick one winner to supply essentially the same engine to both the Navy and the Army.

M1 ARMOR

QUESTION. Last week the Army announced the development of an armor that will give M1 Abrams tanks far better combat survivability. Will this depleted uranium encased in steel slow down the top speed of the tank? What is the exposure of the crew to radiation levels over the long-run? When will these new tanks be off the assembly line and will we deploy them to Europe?

ANSWER. The new M1A1 Abrams armor does not slow down the top speed of the tank. With regard to radiation levels, using time-motion studies of personnel who will be exposed to the armor, it has been concluded that tank crews will receive no more than 80 milli-rem/year. The Nuclear Regulatory Commission standard is 500 milli-rem/year for the U. S. public. Production of the tank with new armor begins in June 1988 with deployment to Europe in October 1988.

RUNWAY -- FORT HUACHUCA

QUESTION. A few years ago we invested some money into a runway at Fort Huachuca. Are there plans to improve this in the future? How about the fuel system; would it be helpful to improve this also?

ANSWER. There have been a number of initiatives to improve Libby Army Airfield at Fort Huachuca. The runway project in 1983 was a joint project between the Air Force and the Arizona Air National Guard. This lengthened the runway from 8,000 linear feet to 12,000 linear feet. This expansion allowed the landing of high performance aircraft for use in training missions that were being moved from Tucson. No further upgrades to the runway are required. Earlier, in 1980, the Army constructed a Flight Control Tower that supports the enhanced functioning of the airfield. The Army and Air National Guard have a joint phased project, programed in FY 90 and 91 to construct a training and operations center that includes a fuel farm (400K gallons) to support the total aircraft fuel requirement for all users of the facility.

QUESTIONS SUBMITTED BY SENATOR WEICKER

APACHE PRODUCTION RATE

QUESTION. Mr. Secretary, it is my understanding that the budget request for 72 AH-64 Apache attack helicopters for FY 89 was prepared on the basis that the aircraft were to be delivered at a rate of 10 per month. However, the actual production rate is planned to be 6 per month. A lower production rate usually means that the unit cost will be higher, so the FY 89 budget request could be understated for procurement of 72 aircraft. Would you please supply for the record the AH-64 Apache program manager's estimate of the funding required to buy the 72 aircraft at a rate of 6 per month.

ANSWER. The $809.1 million request for 72 APACHE's contained in the President's Fiscal Year 1989 budget is based upon the assumption that the Army can negotiate the same production unit cost for the reduced production rate of six per month as that previously negotiated for a rate of ten per month. The Army accepts this challenge and will conduct detailed negotiations with the intent to procure 72 APACHE's for the available budget.

Using classical cost estimating techniques, a change of the production rate to six aircraft per month yields an estimate of $909.5 million for the 72 aircraft.

QUESTIONS SUBMITTED BY SENATOR MCCLURE

TANK REQUIREMENT - NATIONAL GUARD

QUESTION. The Army National Guard will provide almost half of the Army's armored strength in wartime. Yet the backbone of the Guard's tank force, the M60A3, is obsolete in the face of modern Soviet armor and anti armor weapons. I am interested in how the Army intends to meet this critical need for a modern, survivable tank for the National Guard.

ANSWER. The Army's current strategy puts M1s in reserve component units which roundout active units equipped with Abrams. As the Army continues to buy M1A1s, additional reserve component units will be equipped with the Abrams.

QUESTION. Does the Army intend to equip the Guard with the M1 Abrams tank? If so, why is there no additional funding requested for this purpose in the FY 89 budget request? What would be the Army's timetable for reequipping the Guard, and how would M1s be allocated among the various Guard units?

ANSWER. Yes. As the Army continues to buy M1A1s, additional reserve component units will be equipped with the Abrams. The cost of this program is about $2.4 Billion dollars a year. Hopefully Congress and OSD will support the Army's needs to modernize the total heavy Force.

QUESTION. Would the Army also plan to fund the necessary associated equipment required to support M1s, including the acquisition of Bradley Fighting Vehicles to replace the M113 APC?

ANSWER. Yes. The Army supports additional tank and Bradley procurement given adequate funding, which is not at the expense of other Army programs. Any additional procurement must be within the overall context of modernizing the entire heavy Force.

QUESTION. If the Army does not intend to put the Guard in M1s, due to funding constraints or for other reasons, how does the Army intend to provide the Guard with a tank that can survive on the modern battlefield?

ANSWER. The Army does want to put the Guard in M1s. With continued production of the Abrams, M60A3s would eventually be retired from prepositioned war reserves as well. Any funds for tanks would be better spent on buying the best tank available and getting the M60A3 out of the inventory faster.

M60A3 TANK IMPROVEMENTS

QUESTION. The FY 88 Defense Appropriations Bill provided $90 million for improvements in the M60A3 tank. How does the Army intend to spend those funds? Does the Army intend to build prototypes of the M60A4 upgrade to provide a fallback option for a survivable Guard tank force in the event that M1s cannot be provided? If not, why not?

ANSWER. The Army is developing an Armor/Anti-Armor Modernization Plan. Three key components of the plan are: (1) continue procurement of M1A1 tanks, (2) consider up-gunning M1s with 120mm guns and (3) consider issuing M1s to the Reserve Component and National Guard. The Armor/Anti-Armor Modernization Plan does not include any further modifications to the M60A3. Therefore, these funds will be used to support the armor/anti-armor modernization of the M1 tank fleet. The Army does not view the M60A4 tank as a practical or cost effective solution for the National Guard. Consequently, there is no plan to build M60A4 prototypes. The M60A4 would only offer limited crew survivability enhancements and no increased lethality, in that this tank would retain the M105mm gun.

QUESTIONS SUBMITTED BY SENATOR KASTEN

GOVERNMENT-OWNED-CONTRACTOR-OPERATED AMMO PLANTS

Question. Many of the Government-Owned-Contractor-Operated ammunition plants in the United States remain in a layed away status. In Wisconsin, we have the Badger Army Ammunition Plant. I have visited the plant--and the people there are anxious for more opportunities. What could be done to allow this plant to enter into a third party arrangement with the contractor to lease part of the facility?

Answer. Although leasing and facility contracting is available and encouraged for inactive Army Ammunition Plants (AAPs), the Army does not solicit such requests. If a contractor is interested in leasing Badger AAP, it is up to him or her to initiate the request for use of the plant. The degree of utilization of the inactive plants is dependent on the aggresiveness of the contractor or the community encouraging businesses to produce at the plants.

TACTICAL WHEELED VEHICLES

QUESTION. In early February the American Defense Preparedness Association held a conference in Monterey, California. The subject was Tactical Wheeled Vehicles. Many of the Army officers that made presentations were emphatic about the need for austerity. This included improving parts commonality and maintainability. However, there have been a number of recent solicitations for new vehicles from the U.S. Army Tank Automotive Command.

Could you explain how the Army's interest in austerity is being translated into your future planning for truck requirements?

ANSWER. Army officials did in fact discuss the austere budget environment at the American Defense Preparedness Association Conference. Points to be made were that we must strive the accomplish more with the same resources or in fact to achieve the same goals with less resources.

A reflection of this attitude may be noted in the acquisition strategy of tactical wheeled vehicles. To capitalize on our resources, we will see more contract awards based on best value to the Army, rather than predominantly on lowest hardware cost.

During February 1988, two solicitations were released by the Army. One was for the rebuy of M915 series tractors to supplement the Army's Logistics Unit Productivity enhancements. The other was a solicitation for proposals to provide the Army with a 70 ton Heavy Equipment Transport (HET) System. The HET is sorely needed for the transport of our Abrams main battle tanks.

The Army will soon also release solicitations for the Family of Medium Tactical Vehicles (FMTV) and the Palletized Loading System (PLS). These programs will dovetail with the current 5 ton and 10 ton truck procurement programs, and in fact can be visualized as mere extensions of these programs into the future.

Current and future Army tactical wheeled vehicle programs do reflect the realities of austerity. The Army has prioritized its programs based on need and affordability. This prioritization may lead to the termination of some efforts and the initiation of others as we are constrained by zero or negative overall growth.

QUESTIONS SUBMITTED BY SENATOR D'AMATO

FORCE REDUCTIONS

QUESTION. Secretary Marsh, in your statement, you mention that you must reduce the number of brigades in one light division to help meet the end strength goals. Do you expect any similar reduction in the future in other light infancy divisions?

ANSWER. No. The Army has no plans to further reduce its force structure.

Question. If projected increases in Defense spending are not provided by Congress in the outyears, would you expect additional force reductions in the light divisions?

Answer. Not at this time. We would have to look at the size of a decrement and weigh the risk against alternatives we might have.

WAR FIGHTING REQUIREMENTS

Question. Secretary Marsh, in your "opening statement", you said that the Army is ready to successfully perform the missions assigned to it by the national leadership. Yet, in "General Vuono's statement" (p. 11), he states that even before the 1989 decrement, the U.S. Army did not have the structure in being to meet the JCS-recognized war fighting requirements.

Do you see any inconsistency in these statements? What needs to be done in FY 89 to meet the JCS-recognized war fighting requirements?

Answer. GEN Vuono's and my statements are indeed consistent when considered in the larger context of national security. Today's Army is, in fact, ready to accomplish its mission. Today we are postured globally for deterrence, for rapid deployment and reinforcement, and to fight any enemy. At the same time, we have not fully matured all of the support structure required for the force in being and we have [deleted] [deleted] --that force level required to accomplish our national strategy with "reasonable risk." All of us must recognize that the risk of having too few forces is a conscious part of our security policy.

In my statement, I chose to focus on what we are doing at the current level of risk; General Vuono chose to emphasize that structure cuts, such as we are taking in FY 89, cut muscle and bone and add to that risk. Although [deleted] and the associated corps and theater Army support structure are required to meet the JCS-recognized requirements of reasonable risk, the FY 89 Program was never intended to do that. We must all, however, recognize the shortfall and that the price of cuts to our already austere program is less deterrence, less capability in the fight, and more risk to our security as a nation.

INF Treaty Implications

QUESTION. The INF Treaty has placed new importance on our conventional forces in Europe. What will be the impact of the revised FY 89 budget and the projected out year budgets on the readiness and sustainability of the Army in the European theater?

ANSWER. The FY 89 budget and out year program recognizes the increased importance of conventional ground forces in Europe. First, we have protected existing NATO European Troop Strength (ETS). Preservation of existing force commitments is key to our negotiating posture for conventional force reduction talks. We have also protected the readiness of those forces by funding OPTEMPO at a high level. Finally, we have preserved essential sustainability in major warfighting systems, secondary item war reserves, replenishment spares, ammunition, and POMCUS stocks. However, we need Congressional support. Modernization of AFAPs and fielding of a Follow-On To Lance missile system are long standing high priorities for NATO. Specifically addressed in the 1983 Montebello Decision, and reaffirmed by NATO's Nuclear Planning Group in November of 1987, these programs are a NATO goal. Modernization of NSNF is required to maintain the credibility of the NATO triad of forces called for by NATO strategy, especially in light of the INF agreement. We must assure that our conventional forces are strengthened to maintain the credibility of conventional defenses and deterrence. Key elements include our deep attack, counterfire and modernized chemical retaliatory systems. ATACMS, JSTARS and MLRS additions will assure our conventional capability to offset Warsaw Pact quantitative advantages. The Binary Chemical Warhead for MLRS, the 155 binary chemical projectile and the BIGEYE bomb are required to insure our chemical deterrence. We must also maintain our armor and anti-armor capabilities to defeat the fielded Warsaw Pact armored threat as an essential element of deterrence. We also need Congress to be sensitive to the impact on readiness and sustainability of unprogrammed bills in OMA such as foreign currency fluctuation and civilian pay increases.

Reserve Component Resources

Question. Do you plan to allocate additional resources to the Reserve Forces which play a vital role in sustainability?

Answer. Our Reserve Components represent a large and important part of today's Army. Given the Army's share of the Defense TOA, we have created as balanced a program as possible. The resultant President's budget recognizes the importance of the RC and resources them accordingly. The RC Share of the Army budget has grown over time to the point where they now receive 10.8% of our total budget. When the value of procured and distributed equipment and direct support from the Active Army are considered, the RC accounts for about 14% of our budget.

SINCGARS

Question. Secretary Marsh, you speak at length in your statement about the SINCGARS radio and its importance to the future of the Army. I am concerned that although foreign bidders are precluded from bidding as a prime contractor, several bidders are teamed with foreign companies. We have seen foreign governments in the recent past subsidize their industry to penetrate the U.S. market.

What actions has the Army taken to ensure that U.S. industry is protected?

Answer. We share your concern and have taken appropriate steps that, in fact, protect U. S. industry. All SINCGARS for the Army will be produced in the United States, regardless of source. The Army's basis for this was to provide sufficient production capacity to support mobilization requirements for SINCGARS.

SUBCOMMITTEE RECESS

Senator SASSER. The subcommittee is adjourned.

[Whereupon, at 11:52 a.m., Wednesday, March 23, the subcommittee was recessed to reconvene at the call of the Chair.]

DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1989

THURSDAY, MARCH 24, 1988

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10:10 a.m., in Room SD–192, Dirksen Senate Office Building, Hon. J. Bennett Johnston presiding.

Present: Senators Johnston, Stevens, D'Amato, Sasser, Proxmire and Leahy.

DEPARTMENT OF DEFENSE

NATIONAL GUARD AND RESERVE FORCES

RESERVE AFFAIRS

STATEMENT OF HON. STEPHEN M. DUNCAN, ASSISTANT SECRETARY OF DEFENSE FOR RESERVE AFFAIRS

GUARD AND RESERVE READINESS

OPENING REMARKS OF SENATOR JOHNSTON

Senator JOHNSTON. Good morning.

The Defense Appropriations Subcommittee will come to order.

Today we hear from the Assistant Secretary of Defense for Reserve Affairs and the Chiefs of the National Guard and Reserve.

Each year this hearing provides this subcommittee with a special opportunity to review the backbone of our armed forces, the National Guard and Reserve. I know this hearing has been a favorite of Chairman Stennis, who unfortunately cannot be here today. He is recovering from a bout with the flu, and although he may show up later on, we are trying to encourage him to get rid of the last vestiges of that flu before he comes, but knowing Chairman Stennis, he may show up any moment.

In any event, he sends his regards.

SUCCESSFUL PROGRAMS FOR GUARD AND RESERVE

The past few years have been a success story for the Guard and Reserve. There was a time when the Reserve forces got leftover and worn-out equipment. Now, new equipment such as the F-16 fighters, M-1 tanks, Perry class frigates and Apache helicopters are fielded in the Guard and Reserve at the same time these systems are being allocated to the active forces. Manning levels have improved significantly. Since 1980, Guard and Reserve, Selected Reserve strength has increased by 304,000, and full time support has increased from 13 to almost 15 percent of the Reserve force. The members of the Guard and Reserve have proven time and again their ability to successfully take on new missions and challenges.

Today we have Guard and Reserve units assuming active duty missions overseas such as the Air National Guard's airlift support in Panama and tanker duty in Iceland. We have Guard and Reserve brigades in roundout associations with active divisions, making up a third of an active division's combat power.

In my home State we are quite proud of the roundout association between the 256th Infantry Brigade of the Louisiana National Guard and the Fifth Infantry Division Mech. at Fort Polk.

This subcommittee recognizes that the Department of Defense needed to make tough budget decisions in amending the 1989 budget. However, given the cost effectiveness of the Guard and Reserve, the decision to cut Guard and Reserve force structure, manpower, operations and equipment modernization gives us great concern. This subcommittee does not want to see the improvements of the past few years being reversed. The amended 1989 budget eliminates growth of 40,648 Guard and Reserve end strength. Procurement is reduced by $209 million. For all appropriations, the Guard and Reserve budget is reduced from $20.3 billion in 1988 to $19.9 billion in 1989.

Gentlemen, we look forward to your testimony and a review of the 1989 budget, and Secretary Duncan, if you will please proceed as you wish.

Mr. DUNCAN. Thank you, Mr. Chairman.

Sir, I have submitted a statement for the record, but with your indulgence, I will make a few brief opening remarks.

Let me first of all express my pleasure in being here. This is my first appearance before this committee as the Assistant Secretary for Reserve Affairs.

TOTAL FORCE POLICY

As you know, under our Total Force policy, we have increasingly based the national security interests of our Nation on our ability to mobilize, deploy and to employ combat ready Reserve component units and members anywhere in the world. Today, many of our military contingency plans cannot be executed effectively without committing National Guard and Reserve forces in essentially the same time frame as our active forces. This kind of reliance on our Reserve forces requires units of the Selected Reserve, especially the early deploying units, to be manned and equipped at levels which make them ready for combat. This has been one of my primary goals, and it will continue to be one of our most difficult challenges, especially during this time of budgetary constraints.

Several significant events involving the Reserve forces have occurred in recent months, and with your indulgence, I would like to note some of them.

NO-NOTICE EXERCISE

First, in October of last year we conducted the first "no-notice" exercise of the President's statutory authority under 10 U.S. Code Section 673(b) to call up to 200,000 members of the Selected Reserve to active duty. The exercise was conducted in conjunction with an ongoing JCS exercise, "Proud Scout 88." The results of the test confirmed what most of us expected intuitively. Members of the Selected Reserve units were selected by random sample and they were contacted very effectively. Over 92 percent of the Reservists who were contacted actually reported to their Reserve Center or Armory or were excused pursuant to standards set by their respective services.

IRR AVAILABILITY

In fiscal year 1987, we also established a policy requiring eligible personnel of the Individual Ready Reserve to perform at least one day of active duty during the year in order to permit an evaluation of their skill proficiency, a determination of refresher training needs, and a confirmation of their availability for mobilization.

I might add parenthetically that the IRR is, of course, our principal source of pretrained manpower who would be available for warfighting situations.

The screening proved to be very successful and it provided information that we need to manage this program. I personally believe that a regular screening of the IRR is vital in order to assure a flow of augmentation and replacement manpower during combat operations. Because of budgetary constraints, an annual screening of all eligible IRR personnel will probably not be possible, but I would recommend that a viable screening program be continued, and we will certainly be working toward that end.

RECRUITING AND RETENTION EFFORTS

I am also pleased to report that we have had continued success with recruiting and our retention efforts in the Reserve components. Between fiscal year 1980 and fiscal year 1987, annual Selected Reserve enlisted accessions, including both prior service and nonprior service, increased nearly 8 percent. As you pointed out, Mr. Chairman, we have had a net increase of about 300,000 in the Selected Reserve. During the same period, that is, 1980 to 1987, total enlisted strength increased by 33 percent. In addition, the quality of our Selected Reserve remains high with 89 percent of all fiscal year 1987 enlisted Reservists being high school graduates, and 91 percent scoring average or higher on the Armed Forces Qualification Test.

IMPROVEMENT IN EQUIPMENT STATUS

The Department of Defense and the services have also continued to improve the equipment status of the National Guard and Reserve forces. The impact of previous funding of Reserve equipment is now being reflected in both improved capabilities and equipment fill rates. Our fiscal year 1989 report on the status of Guard and Reserve equipment reflects that equipment valued at $9.9 billion was delivered to the National Guard and Reserve forces in fiscal year 1987. Projections from this report also indicate a continued high level of distributions to the Reserve components, averaging $8 billion annually over the next 4 years.

Based on our representative sample, we believe that if we were mobilized at the beginning of fiscal year 1989, we could field approximately 80 percent of the equipment required by the Guard and Reserve forces. The outlook for continued progress in reducing National Guard and Reserve equipment shortfalls is, of course, somewhat less certain in light of tighter budgetary constraints.

ATTITUDE AND PERSONNEL CHARACTERISTICS SURVEY

Another recent development involving the Reserve forces was my release on March 3 of the results of the first comprehensive survey of the attitudes and the personal characteristics of members of the Selected Reserve. More than 52,000 enlisted personnel and 12,000 officers participated in the survey, and the results give us a good profile of those members.

The results reflect their attitudes on such issues as their reasons for remaining in the National Guard and Reserve, their satisfaction with annual training and weekend drills, their perceptions of promotion opportunities, their opinions on whether their training periods allow them to use their individual military skills, their own perceptions of the attitudes of their employers and families about their participation in the National Guard and Reserve, and in other important areas of interest.

There is no doubt, Mr. Chairman, that the overall readiness and warfighting capability of our National Guard and Reserve forces has improved in recent years. Today our forces include more qualified people who work with better equipment and who receive more realistic training than at any previous time in our history. Our implementation of an effective Total Force policy, however, requires that we be relentless in our continued efforts to ensure that the National Guard and Reserve recruit and retain sufficient numbers of properly skilled and trained personnel, and there is sufficient modern equipment to be ready for combat on short notice.

We face several challenges in that regard. I think we have made a good start, but much remains to be done.

Finally, Mr. Chairman, with your indulgence and before I respond to the committee's questions, I would like to express my personal thanks to Senator Stennis for all that he has done in support of our Armed Forces, especially the Reserve forces. For over 40 years his service and leadership on the Senate's Armed Services and Defense Appropriations Committees have resulted in substantial improvements to our Nation's defense posture. Without his continued advocacy of a strong defense, many of the improvements made, the ones that we are seeing now, especially those in recent years, simply would not have been possible. Along with my colleagues both in and out of uniform, I would like to express our gratitude for his vision and for his relentless dedication to our national security during a long and very distinguished career in Congress.

Senator JOHNSTON. We shall certainly pass that along to him, Secretary Duncan.

Thank you very much.

[The prepared statement of Mr. Duncan follows:]

PREPARED STATEMENT OF STEPHEN M. DUNCAN

ASSISTANT SECRETARY OF DEFENSE FOR RESERVE AFFAIRS

Mr. Chairman and Members of the Subcommittee:

I'm very happy to be here today in my first appearance before this Committee as the Assistant Secretary of Defense for Reserve Affairs.

Under the Total Force Policy, we are increasingly basing the national security interests of our nation on our ability to rapidly mobilize, deploy, and employ combat ready Reserve component units and members anywhere in the world. Today, many of our military contingency plans simply cannot be executed effectively without committing National Guard and Reserve Forces in the same time frame as our Active Forces. This kind of reliance on our Reserve Forces requires that units of the Selected Reserve, especially the early deploying units, be manned and equipped at levels which make them ready for combat on short notice. This has been one of our primary goals and it will continue to be one of our most difficult challenges during this time of severe budgetary constraints.

Significant progress is being made in the training and equipping of the Reserve components and the size of our Reserve Forces has continued to increase. As we ask our National Guardsmen and Reservists to assume greater responsibilities, however, it becomes even more essential that we give them the tools to do the job. In this regard, I solicit your active support to ensure that we have the resources that are necessary for the maintenance of highly trained and ready Reserve Forces.

FY 1989 Amended Budget Request

The specific budget estimates in the President's Amended Budget Request, exclusive of procurement funds (which are not obtainable by component), for the Reserve components are as follows:

TABLE 1

TOA ($ In Millions)

	FY 1987 Actual	FY 1988 Estimate	FY 1989 Estimate
ARMY NATIONAL GUARD			
MILPAY	3,083.2	3,234.3	3,325.3
O&M	1,742.2	1,856.5	1,797.0
MILCON	140.9	184.4	138.3
TOTAL	4,966.3	5,275.2	5,260.6
ARMY RESERVE			
MILPAY	2,110.0	2,262.9	2,260.0
O&M	769.2	857.5	794.9
MILCON	86.8	95.1	79.9
TOTAL	2,966.0	3,215.5	3,134.8
NAVAL RESERVE			
MILPAY	1,394.0	1,513.0	1,621.4
O&M	880.7	929.9	979.2
MILCON	28.0	40.3	34.2
TOTAL	2,302.7	2,483.2	2,634.8

TABLE 1 (Cont)
TOA ($ In Millions)

	FY 1987 Actual	FY 1988 Estimate	FY 1989 Estimate
MARINE CORPS RESERVE			
MILPAY	277.3	295.4	315.7
O&M	64.0	69.5	77.5
MILCON	16.5	33.4	14.2
TOTAL	357.8	398.3	407.4
AIR NATIONAL GUARD			
MILPAY	947.8	988.2	1,027.4
O&M	1,787.5	1,958.1	1,965.4
MILCON	148.9	151.3	147.5
TOTAL	2,884.2	3,097.6	3,140.3
AIR FORCE RESERVE			
MILPAY	569.3	615.1	655.3
O&M	924.6	1,001.0	1,028.5
MILCON	58.9	79.3	58.8
TOTAL	1,552.8	1,695.4	1,742.6
TOTAL DOD			
MILPAY	8,381.6	8,908.9	9,205.1
O&M	6,168.2	6,672.5	6,642.5
MILCON	480.0	583.8	472.9
TOTAL	15,029.8	16,165.2	16,320.5

TABLE 2

Analysis of Reserve Component Growth

FY 1980 - FY 1989
TOA ($ Millions)

Reserve Component Budget	FY 1980	FY 1989	Increase FY80vs89	Percent FY80vs89
Current Dollars				
Military Personnel	2,457	7,553	5,096	307%
Retirement Accrual	--	1,652	1,652	100%
Operation/Maintenance	3,526	6,673	3,147	189%
Procurement	1,458	2,310	852	158%
Military Construction	120	584	464	487%
Total with Accrual	7,561	18,772	11,211	248%
Total without Accrual	7,561	17,120	9,559	226%
Constant Dollars				
Military Personnel	4,156	7,553	3,397	182%
Retirement Accrual	--	1,652	1,652	100%
Operation/Maintenance	4,912	6,673	1,761	136%
Procurement	2,152	2,310	158	107%
Military Construction	169	584	415	346%
Total with Accrual	11,389	18,772	7,383	165%
Total without Accrual	11,389	17,120	5,731	150%

Reserve Component End Strength				
Manpower (In Thousands)				
Selected Reserve	869	1,173	304	135%

Several significant events involving our Reserve Forces have occurred in recent months. Perhaps the three most important developments have been the "no-notice" exercise of the President's statutory authority to call up to 200,000 members of the Selected Reserve to active duty; the convening by the President of the Sixth Quadrennial Review of Military Compensation, which for the first time has focused on reserve compensation issues; and the completion of the first successful screening of the Individual Ready Reserve (IRR).

In July, 1987, then Secretary Weinberger directed the design of a method of testing the availability of those members of the Selected Reserve who could be ordered to active duty by the President, without declaration of a national emergency, pursuant to the provisions of 10 USC, Section 673b. We decided to conduct this test in conjunction with the October 1987 JCS exercise, PROUD SCOUT 88. I am very pleased to report to you that our National Guardsmen and Reservists responded as expected. During the seventy-two hour time period of the test, nearly 94 percent of the members of the units selected by random sample were contacted, and over 92 percent actually reported to their Reserve Center or Armory or were excused pursuant to standards set by their respective Services.

The second development was the convening of the Sixth Quadrennial Review of Military Compensation on January 1, 1987, as required by law. President Reagan, in his directions to the Secretary, stated:

> "I am particularly interested in the compensation of the Reserve components, which have an increasingly critical role in the defense of our country. We must provide our military services with pay and benefit programs that encourage large numbers of qualified men and women to serve in Guard and Reserve Units.
>
> The price of this commitment is not small, but I want to assure the American people that it is no larger than the nation's security requires. Consequently, this quadrennial review should undertake a comprehensive evaluation of the benefits and costs of all reserve compensation programs."

Because this is the first review to deal with reserve compensation issues, we expect to see a significant number of recommendations in the final report.

The third major event, the successful screening of the Individual Ready Reserve (IRR), will be discussed in greater detail beginning on page 13.

Selected Reserve Personnel Strength

The Department has budgeted for a Selected Reserve strength increase of more than 20,000 in FY 1988 and will maintain this new level in FY 1989. This increase is required to meet the most critical manpower demands of both new and expanded missions for the Reserve components. The projected end strengths for FY 1988 and FY 1989 reflect a growth of over 300,000 Selected Reserve members since FY 1980 - the beginning of this Administration.

An increase in Selected Reserve end strength of 5,400 for the Army National Guard, and 7,000 for the Army Reserve is planned for FY 1988, and the new force levels will be maintained in FY 1989. For the first time since World War I, the Selected Reserve components of the Army will exceed the strength of the Active Army. These increases reflect our continued effort to reach our trained unit strength goal of 90% of our wartime requirement. Force structure increases and equipment modernization programs for Army aviation elements also are included in our request. For example, one new attack helicopter battalions equipped with AH-1S (Cobra) helicopters will be added in FY 1988, and six attack helicopter battalions in FY 1989.

The Air National Guard and the Air Force Reserve will continue force modernization to enhance their wartime capabilities. The Air Reserve components will receive additional C-5 and new C-130H tactical airlift aircraft. In addition, they will expand their role in Special Operations in FY 1988, activating an Air Force Reserve unit at Davis-Monthan Air Force Base.

To meet the increased wartime manning requirements of the Naval Reserve, we have planned for a Selected Reserve end strength increase of 4,500 in FY 1988 and we will maintain this increased level in FY 1989.

The Fleet Hospital Program is one of the fastest growing programs in the Naval Reserve. Fleet Hospitals are self contained, modular, rapidly deployable medical facilities that provide comprehensive care for fleet and Marine forces engaged in combat operations. Eventually, more than half the units in the Fleet Hospital Program will be manned by Naval reservists.

The Naval Reserve's Craft of Opportunity (COOP) program will grow from nine to twenty-two craft by FY 1989. The objective of this program is to enhance the Navy's mine countermeasures capability through the use of Navy patrol craft and converted civilian vessels to counter the mine threat to major U.S. military and commercial ports.

The surface reserve frigate program began in 1982, with the transfer of four KNOX Class frigates to the Naval Reserve. The program has continued to grow, and with four more PERRY Class and one more KNOX Class frigates added during FY 1988, will total 24 frigates in an ambitious program to assign 26 modern frigates to the Naval Reserve by 1990.

We requested an increase in the end strength of the Selected Reserve of approximately 1,300 in FY 1988 for the Marine Corps Reserve in order to meet requirements generated by additional unit activations and increased ground combat and support capability. The 4th Marine Aircraft Wing will activate a second KC-130T squadron and a second AH-1J squadron in FY 1988.

TABLE 3
Selected Reserve End Strength*
(Thousands)

	**FY 1980 Actual	FY 1985 Actual	FY 1986 Actual	FY 1987 Actual	FY 1988 Estimate	FY 1989 Request
ARMY NATIONAL GUARD	366.6	440.0	446.2	451.9	457.3	457.3
ARMY RESERVE	213.2	292.1	309.7	313.6	320.6	320.6
NAVY RESERVE	97.2	129.8	141.5	148.1	152.6	152.6
MARINE CORPS RESERVE	35.7	41.6	41.6	42.3	43.6	43.6
AIR NATIONAL GUARD	96.3	109.4	112.6	114.6	115.9	115.2
AIR FORCE RESERVE	59.8	75.2	78.5	80.4	82.4	83.6
DoD	868.7	1,088.1	1,130.1	1,150.9	1,172.4	1,172.9
COAST GUARD RESERVE	11.9	12.6	13.0	13.3	12.0	13.0

* Numbers may not add due to rounding

** For consistency, FY 1980 strengths have been adjusted to include Navy Training and Administration of Reserves (TARs) and Category "D" Individual Mobilization Augmentees (IMAs)

Despite the initial training requirements associated with these total strength increases plus the normal personnel losses, our trained strength in units (i.e., strength stated in terms of unit members who have completed initial training) is improving, as shown in Table 4. However, the rate of progress will be affected by the continuing growth of wartime requirements associated with increased Reserve component missions.

TABLE 4
Trained Manning In Units Against Wartime Requirements
(Thousands)

	FY 1985 Actual	FY 1986 Actual	FY 1987 Est	FY 1988 Est	FY 1989 Est
Wartime Req.in Units	1110.0	1,134.1	1,159.4	1,182.4	1,203.9
Total Trained Pers. in Units	957.0	997.0	1,013.2	1,033.7	1,044.0
Percent Trained in Units	86.2%	87.9%	87.4%	87.4%	86.7%

Full-Time Support Personnel

Concurrent with the expanded role of the Reserve Forces is the continued growth in full-time support activities provided by Active component personnel, Active Guard/Reserve personnel, military technicians, and civil service personnel. The personnel organize, train, recruit, and administer the Reserve components, in addition to maintaining equipment and other logistical activities. The total full-time support strength at the end of FY 1987 was approximately 15 percent of the Selected Reserve.

The effectiveness of the training provided to drilling reservists is a function of the quality of the full-time support force. Therefore, our goal is to field a force of highly motivated and skilled personnel that is cost-effective and capable of producing well-trained Reserve component members and units fully prepared for rapid mobilization.

We have requested an increase in full-time personnel of 5,418 for FY 1988 and an additional 70 for FY 1989. Tables 5 through 8 depict the current plan for our full-time support program.

TABLE 5

Full-Time Support (End Strengths)
Active Guard and Reserve (AGR)

	FY 1985 Actual	FY 1986 Actual	FY 1987 Actual	FY 1988 Estimate	FY 1989 Request
Army National Guard	21,059	23,780	25,237	25,725	25,725
Army Reserve	10,751	12,159	12,414	13,329	13,329
Naval Reserve	15,012	18,391	21,288	21,991	21,991
Marine Corps Reserve	1,134	1,478	1,742	1,945	1,945
Air National Guard*	6,369	7,098	7,623	7,836	7,948
Air Force Reserve	570	612	629	669	657
Total DoD	54,895	63,518	68,933	71,495	71,595

* Excludes non dual-status support technicians hired under Title 32.

TABLE 6

Full-Time Support (End Strengths)
Active Component

	FY 1985 Actual	FY 1986 Actual	FY 1987 Actual	FY 1988 Estimate	FY 1989 Request
Army National Guard	973	769	771	784	784
Army Reserve	1,230	1,230	1,230	1,230	1,230
Naval Reserve	5,847	6,843	6,945	6,933	6,510
Marine Corps Reserve	5,180	5,180	5,350	5,062	5,087
Air National Guard	724	719	731	606	591
Air Force Reserve	743	649	572	624	599
Total DoD	14,697	15,390	15,599	15,239	14,801

TABLE 7-1

Full-Time Support (End Strengths)
Civilians

	FY 1985 Actual	FY 1986 Actual	FY 1987 Actual	FY 1988 Estimate	FY 1989 Request
Army National Guard*	2,124	2,477	2,572	2,547	2,547
Army Reserve	7,643	6,221	4,520	5,659	5,702
Naval Reserve	3,081	3,102	3,041	3,174	3,164
Marine Corps Reserve	221	252	343	352	352
Air National Guard	2,474	2,432	2,462	2,457	2,455
Air Force Reserve	4,817	4,867	4,906	4,577	4,573
Total DoD	20,360	19,351	17,844	18,766	18,793

*Includes Title 5 and Title 32 civilian employees.

TABLE 7-2

Full-Time Support (End Strengths)
Technicians

	FY 1985 Actual	FY 1986 Actual	FY 1987 Actual	FY 1988 Estimate	FY 1989 Request
Army National Guard	23,769	25,292	25,593	25,979	25,979
Army Reserve	6,706	6,949	7,276	7,529	7,916
Air National Guard	22,145	22,005	23,049	23,115	23,113
Air Force Reserve	8,019	8,306	8,722	9,994	10,004
Total DoD	60,639	62,552	64,640	66,617	67,012

Table 8 shows the number of total full-time support personnel assigned by component and the percent the full time force is to the Selected Reserve Force.

TABLE 8

Full-Time Support (End Strengths)
(AGRs, Technicians, Active Component)

	Actual FY 1980		Actual FY 1986		Actual FY 1987		Estimate FY 1988		Estimate FY 1989	
Army National Guard	33,037	9.2%	52,318	11.7%	54,173	12.0%	55,035	12.0%	55,035	12.0%
Army Reserve	17,004	8.0	26,559	8.6	25,440	8.1	27,747	8.7	28,177	8.8
Naval Reserve	20,783	21.4	28,336	20.0	31,274	21.1	32,098	21.0	31,665	20.8
Marine Corps Reserve	4,840	13.6	6,919	16.6	7,435	17.6	7,359	16.9	7,384	16.9
Air National Guard	25,782	26.8	32,254	28.6	33,865	29.6	34,014	29.3	34,107	29.6
Air Force Reserve	11,942	20.0	14,434	18.4	14,829	18.4	15,864	19.3	15,833	18.9
Total DoD	113,388	13.1%	160,820	14.2%	167,016	14.4%	172,117	14.7%	172,201	14.2%

Individual Ready Reserve

The Individual Ready Reserve (IRR) is our principal source of pretrained individuals needed to fill wartime manpower shortages in active and reserve units, to replace unskilled or partially skilled unit members, and to replace combat casualties during the first 120 days of a full mobilization.

The Army, Navy, and Air Force have used IRR Reenlistment Bonus Programs to reduce specific shortages in combat and other critical wartime skills. Since the last quarter of FY 1984, when these programs were first implemented, over 8,600 service members in combat and combat support skills have received bonuses to reenlist in the IRR.

In FY 1987, we implemented a requirement for eligible IRR personnel to perform at least one day of active duty during the year in order to permit the evaluation of IRR skill proficiency, determination of refresher training needs, and confirmation of mobilization availability. It also reinforced the IRR members' recognition of their legal obligation to notify their respective Service concerning changes in their personal status. Table 9 illustrates the IRR reporting results.

TABLE 9
IRR Reporting Results

	Strength	Ordered	Screened(%)	%IRR
Army	287,000	197,000	104,000 (53%)	36%
Navy	78,000	27,000	21,000 (80%)	27%
Marine Corps	45,000	15,000	13,000 (84%)	28%
Air Force	48,000	17,000	14,000 (81%)	29%
Total	459,000	256,000	152,000 (59%)	33%

There have been many positive side benefits of the screening:

(a) the Navy discovered a 75% positive attitude toward the two-way communication established between Navy IRRs and their personnel center;

(b) the Army discovered that 26% of its IRR was interested in Selected Reserve programs, and that at least 5,380 were confirmed joins;

(c) the Air Force discovered that 18% of its IRR had a change in the number of dependents;

(d) all components found the exercise to be a very good method of ensuring and correcting the accuracy of the IRR data base;

(e) the Navy and Air Force found that skill degradation and physical fitness are not problem areas; and

(f) we discovered that some IRR members moved as many as ten times in the first year after their discharge from active duty.

Table 10 depicts the Individual Ready Reserve Strength profile by Reserve component.

TABLE 10
IRR Strength

Component	FY 1986 Actual	FY 1987 Actual	FY 1988 Estimate	FY 1989 Estimate
Army National Guard (ING)	9,522	10,285	10,280	10,342
Army Reserve	300,818	287,459	300,883	286,066
Naval Reserve	73,824	78,429	79,425	82,100
Marine Corps Reserve	49,340	44,580	49,000	52,000
Air Force Reserve	48,709	48,288	43,850	43,900
Total	482,213	469,041	483,438	474,408

We believe that regular screening of the IRR is vital to the flow of augmentation and replacement manpower during combat. Because of budgetary constraints, an annual screening of all eligible IRR personnel will not be possible, but we believe that a viable screening program should be continued. This would ensure that IRR members are called to report at least once during the remaining term of their initial military service obligation (MSO).

The results of the FY 1987 screening indicate a salient issue that should be discussed further. The Authorization Act of 1979 directed the Secretary of the Army to retain many individuals in the IRR that would normally have been discharged. This policy did not affect the other components. The statute was adopted at a time when serious shortages existed within the IRR. It is time to reexamine this policy.

The Army IRR strength has grown from a low of 150,000 in 1977 to an FY 1987 end strength of 287,000 (243,000 enlisted). Approximately 42% of the Army IRR enlisted were transferred in lieu of discharge for the following reasons: unskilled (did not complete training), unsatisfactory performance, unsuitability, pregnancy, hardship, dependency, parenthood, Secretarial authority, or failure to meet medical standards. Approximately 72,000 members were transferred as a result of unsatisfactory participation in Selected Reserve units.

I am concerned about the reliability of this last group. During the FY 1987 screening program, less than 30% of this group appeared for screening as required, as compared to 65% or better for the remainder of the IRR. It is clear that the members of this group are no more likely to honor their IRR committment than they honored their committment to the Active Force or to the Selected Reserve. This amounts to approximately 50,000 or 20% of the Army IRR enlisted population.

As a result of the IRR screening program, the Army is improving its management of the IRR in the following areas: better tracking and screening of the inventory; review of those separations that are unrelated to actual performance such as pregnancy and hardship; use of IRR bonuses for critical skills; and aggressive attempts to obtain current addresses for non-locatable IRR members. The Army is also conducting a review of the causes for unsatisfactory participation in an effort to improve retention in troop program units.

Selected Reserve Recruiting

Demographic projections for the next five to seven years indicate that we will have a reduced population of young, eligible military candidates. Moreover, despite some instability in the financial markets, the American and world economies remain strong with high employment levels. These two factors would normally suggest future difficulties for military recruiters. However, investments in recruiting programs, such as bonuses, educational assistance, advertising, and additional recruiters, have kept our reserve military strength at high levels in both quantity and quality. There were, for example, 5,700 more non-prior service (NPS) recruits in the Selected Reserve in FY 1987 than in FY 1986.

Between FY 1980 and FY 1987, annual Selected Reserve enlisted accessions, including both prior and non-prior service, increased nearly 8 percent. During this same period, total enlisted end-strength increased by 33 percent. This figure indicates a continuing high level of retention in the Selected Reserve. The ratio of non-prior service accessions to prior service accessions varied somewhat during the period, but it ended slightly higher than the average for the entire period. For example, the percent of non-prior service accessions was 42% in 1980 and 45% in 1987. The average for non-prior service accessions during the eight-year period was 42%. Table 11 summarizes Selected Reserve enlisted recruiting in FY 1980 through FY 1987.

TABLE 11
DoD Selected Reserve
Enlisted Accessions
FY 1980 Through FY 1987

CATEGORY	1980	1981	1982	1983	1984	1985	1986	1987
PS	128,373	126,501	138,321	130,975	130,624	143,215	147,921	130,580
NPS	93,683	104,077	106,024	94,679	87,819	85,555	102,649	108,386
TOTAL	222,056	230,578	244,345	225,654	218,443	228,770	250,570	238,966
END STRENGTH	742,221	777,376	827,302	861,507	897,749	936,525	972,197	987,119

The quality of Selected Reserve accessions remains high. Eighty-nine percent of all FY 1987 enlisted reservists were high school graduates, a one percent improvement over FY 1986. Similarly, ninety-one percent scored average or above (Categories I through III) on the Armed Forces Qualification Test (AFQT), which is nearly identical to scores in FY 1986. The overall improvement in the quality profile of recruits since 1980 is substantial, as shown in Table 12.

TABLE 12
Selected Reserve Enlistments (DoD)
Quality Indicators

	No. of HS Grads*	HS Grads. % of Total Enlist.	No. of AFQT I-III**	AFQT I-III % of Total Enlist.
FY 1980	168,500	76%	172,200	78%
FY 1987	213,000	89%	217,000	91%

* Includes equivalency certificate and diploma graduates as well as high school students who enlisted prior to their graduation and were expected to graduate.
** AFQT Categories I-III include enlistees who score average or above on the enlistment test.

Recruiting Resources and Incentives

We are continuing to achieve our total end strength objectives. The FY 1987 authorized end strength contained an objective for a Selected Reserve end strength of 1,156,977. Actual end strength at the end of FY 1987 was 1,150,855, over 99% of the objective. The growth in the Selected Reserve end strength and the maintenance of high quality in accessions clearly appears to be the result of increased recruiting resources (including advertising, recruiting personnel and support assets) and expanded incentive programs (including enlistment and affiliation bonuses, loan repayment programs, and educational assistance).

TABLE 13
DoD Reserve Components
Recruiting Resources By Category
(Current $ Millions)
(Includes New And Anniversary Payments)

	Actual FY 1987	Program FY 1988	Budget FY 1989
Rec/Support*	403.3	423.5	432.4
Advertising	51.6	50.6	50.5
Bonuses**	88.7	90.7	99.4
Total***	543.6	564.9	582.1

* Includes military and civilian payroll costs associated with recruiting.
** Includes enlistment (prior and non-prior service), and affiliation bonuses; educational assistance other than Montgomery GI Bill; loan repayment programs for enlisted and health care officer personnel; and health care stipends.
*** Totals may not add due to rounding.

Advertising has played an important role in increasing the end strength and improving the quality of Selected Reserve personnel. The Joint Recruiting Advertising Program (JRAP) has been particularly significant to the Reserve components. These high quality national media presentations have included television, radio, magazines, and newspaper supplements, many of which have been in conjunction with Active Force promotions. Of the sums shown in Table 13 for advertising, $2.0 million dollars were earmarked for Reserve component advertising in the JRAP in 1986 and again in 1987. The request for 1989 calls for an increase to $3.5 million. This is money well-spent and it serves not only to maintain high visibility in the public mind for military service, but also to effectively portray the diversity, the challenges, and the solid value of military experience for young people today.

Table 14 identifies recruiting resources by Reserve component for the three-year period of FY 1987 through FY 1989.

TABLE 14

Recruiting Resources* By Reserve Component
(Current $ In Millions)

Component	Actual FY 87	Estimated FY 88	Budget FY 89
Army National Guard	234.5	236.1	239.4
Army Reserve	162.7	171.2	178.1
Naval Reserve	71.0	77.8	81.2
Marine Corps Reserve	18.6	18.4	18.5
Air Force Reserve	21.5	24.4	25.0
Air National Guard	23.2	34.9	36.4
JOINT ADV.	2.0	2.1	3.5
TOTAL**	544.3	543.6	582.1

* Excludes educational assistance

** Totals may not add due to rounding

The FY 1989 request for Selected Reserve recruiting is $17.2 million more than the FY 1988 program and $82.0 million more than in FY 1986. We are confident that by maintaining this level of recruiting effort, we can ensure the continued success of the Reserve component portion of the All-Volunteer Force.

The Montgomery GI Bill for the Selected Reserve

The Montgomery GI Bill is a valuable recruiting and retention tool for the Selected Reserve. Since participation in the program requires an obligated term of service of at least six years in the Selected Reserve, one measure of the value of the Bill is an increase in the number of six-year enlistments. Comparing the two-year period before the program's effective date to the two-year period following reveals that Selected Reserve accessions into six, seven, and eight year terms increased from 58.4% to 66.1%. Of course, not all of this increase may be attributable to the Montgomery GI Bill, since enlistment bonuses and general economic conditions also play a role in these decisions, but it was certainly a significant factor.

Participation in the program has shown steady growth since its inception in July 1985. Table 15 reflects the eligible population and participation rates by Reserve component through FY 1987.

TABLE 15
Montgomery GI Bill-Selected Reserve
Eligibles and Participants by Component

Reserve Component	Eligibles*	Applicants **	% of Participation
Department of Defense	233,304	78,974	33.9%
Army National Guard	100,022	32,260	32.3
Army Reserve	45,674	18,555	40.1
Naval Reserve	23,674	7,681	32.4
Marine Corps Reserve	10,587	4,098	38.7
Air National Guard	32,233	11,057	34.3
Air Force Reserve	21,114	5,323	25.2

* As of December 31, 1987
** As of December 26,, 1987

The Montgomery GI Bill has proven to be a well-targeted incentive. It is directly aimed at young high school graduates interested in pursuing their education beyond high school. Ninety percent of the enlisted participants in the program are under age 30 while only fifty-six percent of all potentially eligible enlisted members are under age 30. Fifty percent of the participants are under age 22. With eighty-five percent of current participants attending school either full-time or three-quarter time, the GI Bill seems clearly to be reaching its intended audience. Table 16 identifies the participation level by Reserve component.

TABLE 16
Montgomery GI Bill-Selected Reserve
Level of Individual Participation by Component*

Reserve Component	Full-Time	3/4 Time	1/2 Time	Percentage of Full or 3/4
Department of Defense	44,963	7,439	9,273	85.0%
Army National Guard	19,277	2,793	3,162	87.5
Army Reserve	10,177	1,547	1,627	87.8
Naval Reserve	4,331	805	1,079	82.6
Marine Corps Reserve	2,393	315	265	91.1
Air National Guard	6,149	1,229	1,985	78.8
Air Force Reserve	2,636	750	1,155	74.6

* As of November 4, 1987

Table 17 shows the actual and programmed expenses of the Montgomery GI Bill.

TABLE 17
Montgomery GI Bill-Selected Reserve
Resources
(Current $ In Millions)

Actual FY 1987	Estimated FY 1988	Budget FY 1989
160.4	154.9	142.2

There may be some decline in annual enrollments as total Selected Reserve end strength stabilizes and as new eligibles are drawn primarily from new accessions. This would be a smaller pool than the total population of current members plus new accessions which existed when the program was first effective in July, 1985. Annual school enrollments by fiscal year have been 1,650 in FY 1985, 30,900 in FY 1986, and 31,900 in FY 1987.

The Montgomery GI Bill-Reserve is unique in at least two ways. First, it pays benefits to the participant before the service which establishes entitlement for those benefits is completed. Second, administration of the program is shared by two agencies, the Department of Defense and the Veterans Administration. With participating reservists and their units spread throughout the United States, only an automated system could manage timely identification of eligibility and payment of benefits. The Defense Manpower Data Center (DMDC) at Monterey, California, acts as the central clearing house for Service reports of eligibility. This information is passed weekly to the Veterans Administration which makes it available to the VA regional offices. Benefit payments are processed by the VA in much the same manner that any other entitlement program is administered. There have been some difficulties in establishing a smoothly-functioning system encompassing the reserve units, DMDC, and the Veteran's Administration, but most of these have been resolved.

Selected Reserve Retention

As I observed earlier, annual Selected Reserve enlisted accessions increased nearly 8.0% between 1980 and 1987, while enlisted end strength increased 33%. The growth in end strength not resulting from recruiting is due to increased retention.

Reenlistment bonuses are paid to reservists serving in designated critical military skills or units. Members are authorized to receive up to $2,500 for a three-year reenlistment and up to $5,000 for a new six-year term. In keeping with the guidance contained in the FY 1986 Defense Authorization Act to phase in implementation of the full authorized bonus amounts, however, bonus payments are currently limited to $1,500 and $3,000 for three and six-year reenlistments, respectively. These bonuses are also authorized for prior Active Force members who join the Selected Reserve to serve in a critical military skill.

Table 18 shows total reenlistment bonus authority for FY 1987 through FY 1989.

TABLE 18
Selected Reserve Reenlistment
Bonus Authority
(Current $ In Millions)
(Includes New and Anniversary Payments)

	Actual FY 1987	Estimated FY 1988	Budget FY 1989
Reenlistment Bonuses	$30.9	$32.3	$35.3

One measure of the effectiveness of the reenlistment bonus is the current enlisted retention rate, particularly for those personnel who reenlist at the end of their first term. This is due to the fact that reenlistment bonuses for the Selected Reserve can be paid only once, and even then, only to members with less than ten years of total military service. Table 19 shows the retention rate by Reserve component for first-term enlistees.

TABLE 19
Reserve Enlisted Retention Rates
First-Term Enlistees Percentage

COMPONENT	FY 1985	FY 1986	FY 1987
Army National Guard	85%	83%	80%
Army Reserve	50	66	65
Naval Reserve	89	89	82
Marine Corps Reserve	69	71	75
Air National Guard	91	90	82
Air Force Reserve	78	81	81

Equal Opportunity Issues

The Reserve Components have been a full partner in Department of Defense initiatives relating to Equal Opportunity. The Assistant Secretary of Defense for Reserve Affairs participates or is fully represented on the Defense Equal Opportunity Council (DEOC), as well as on the working groups and subcommittees within the Council. The soon to be published DoD Directive establishing new Affirmative Action planning and reporting requirements will involve National Guard and Reserve members tracking the same data as the Active components. The views of the Office of Reserve Affairs were provided throughout the process of developing this new directive.

The overall racial and ethnic composition of the Reserves generally parallels the Active Forces, although, there are many regional differences based on the available manpower pool in specific geographic locations. This should be more easily examined through the use of the specific demographic reporting requirements contained in the new directive. Representatives of the Office of Reserve Affairs, working on other Equal Opportunity Objectives within the framework of the DEOC and its subcommittees, will continue to ensure that the Reserve components remain full participating partners in this important work.

Women in the Selected Reserve

For FY 1987, women in the Selected Reserve constituted 11.4% of the end of year strength of the Reserve components. This was an increase from the FY 1986 ratio of 10.8%. Significantly, women constituted 42.6% of our net growth for the year.

DEERS Pre-Enrollment

The Defense Enrollment Eligibility Reporting System (DEERS) was established to provide both DoD and Congress with a single source of entitlement and demographic information on the Uniformed Services beneficiary population. DEERS supports the Reserve Components in the areas of benefit confirmation for those on active duty, pre-enrolling Guard and Reserve members and their dependents prior to mobilization, dental panograph x-ray casualty identification and reporting of HIV testing. The Reserve Component interface to the DEERS data base was endorsed by the House Appropriations Committee in 1982. We reported to Congress last year that Phase I pre-enrollments of nearly 500,000 individuals (200,000 members and their dependents) in DEERS was nearing completion. This pre-enrollment ensures that members and their families assigned to early deploying Selected Reserve units will have medical and other benefits available to them upon mobilization. We are actively pursuing plans to pre-enroll the remaining Selected and Ready Reserve as previously recommended by the House Appropriations Committee.

Real Time Automated Personnel Identification System

The Congress and the General Accounting Office have both expressed concern over waste and fraud in the delivery of benefits to military sponsors and their dependents. The Real Time Automated Personnel Identification System (RAPIDS) was established to streamline the process of identification card issuance and to improve the timeliness of confirmation with the DEERS data base. RAPIDS and DEERS will serve as the vehicles by which all components, including the Reserve components, determine identification, eligibility and access. Programs such as commissary benefits to the Selected Reserve, Reserve component Family ID Cards, exchange privileges and retirement accounting for the Reserve components can be greatly enhanced by full implementation of pre-enrolling the reserves into the DEERS and RAPIDS systems.

Reserve Component Family Identification Card

The Reserve Forces Policy Board recommended the creation of a common DoD Reserve Component Family Identification Card to facilitate access to military installations and to document entitlements to benefits. Although all of the Reserve components now have their own Family Identification Cards, we are proceeding with this initiative since the application procedures for the common DoD ID card would be used for DEERS pre-enrollment. We believe, therefore, that this would enhance individual personnel readiness for mobilization. We hope to have these cards and the implementing directives printed and in distribution by the end of this year.

Family Policy Issues

As the importance of the National Guard and Reserve contributions to the Total Force increases, the families of guardsmen and reservists are affected in important ways. The results of the recently released member portion of the Reserve Component Family Survey demonstrate that the presence or absence of family support is a very significant factor in the retention and readiness of the Reserves. It is incumbent on us, therefore, to develop programs which include and directly support the families of reservists.

The soon to be released results of the spousal portion of the Survey will further reinforce the importance of the family in this equation and will provide areas of specific concern that can be targeted by future initiatives. The two portions of the Survey are the most comprehensive and accurate appraisals of Reserve and National Guard attitudes ever taken, and I am confident that they represent a blueprint for issues and action for years to come. We must ensure that Guardsmen, Reservists, and their families are appropriately considered in all quality of life issues. They must be part of the Department of Defense family if we are to retain the kind of high caliber reservists who are necessary for the expanding missions.

Reserve Component Medical Readiness

Achieving the ability to respond quickly and adequately to a wartime casualty flow has been one of the most critical goals of my office and of the Office of Assistant Secretary of Defense for Health Affairs. Members of the staffs of both offices serve on all of the major medical readiness related groups within the Department and they continue to work together. The Department and the Services have taken a variety of actions to resolve this serious problem.

Each of the Services has committed significant recruiting resources to increase needed medical manpower. All of the Services programmed substantial growth in the number of medical recruiters beginning in FY 1988. The recruiters' efforts will be targeted toward wartime specialty requirements for officer and enlisted professionals.

Two personnel incentive programs, designed to increase the number of Reserve component health care professionals in critical wartime specialties, were approved by Congress during FY 1986. The Congress authorized a stipend program for selected specialists in training and extended the educational loan repayment program to critically short health care professionals in the Reserve components, and provided authority to award constructive service credit for nursing experience. I believe that these programs, coupled with the age and experience authority, will greatly assist us in reducing critical medical wartime shortages.

During the course of our work with the professional medical associations, we discovered a lack of awareness about opportunities in the Reserve. This lack of awareness has surely been an obstacle to reducing the shortfalls. In order to address this concern, the Office of Health Affairs will begin a Direct Mail Marketing Campaign in March, 1988. Physicians and nurses will be contacted through a personal, signed letter from Assistant Secretary Mayer. Each letter has been designed for the specific physician and nurse population needed to overcome the wartime shortage of medical personnel. The letter will advise each addressee of the Department's shortfall, the opportunities for Reserve participation, and the benefits associated with Reserve service. The letter will also provide addressees with an 800 telephone number and a business reply card in the event that they desire additional information.

The professional medical associations assert that there are a significant number of physicians and nurses who will join a

Reserve component if the time required is minimal. We have explored this need in the context of the Individual Ready Reserve and the Air Force is conducting a pilot program to test this type of participation option. The member would train five days annually for indoctrination, medical readiness training, contingency hospital familiarization and active duty facility tours. In conjunction with this concept, the Air Force is exploring the recruitment of surgical teams. This is similar to the civilian hospital unit utilized during WWI and WWII that was so successful. We are continuing our vigorous efforts to explore these and any other programs that will provide a readily accessible pool of qualified medical professionals who could be utilized to meet wartime requirements.

Coast Guard Reserve

We remain concerned that the shortfall in the Reserve Training Appropriation for Fiscal Year 1988 will make it necessary to reduce Coast Guard Reserve strength level to that of two years ago - 12,000. The Coast Guard Reserve's fill rate of mobilization requirements is far below that of other Reserve components. This poses a serious National Security problem in their mobilization missions of Harbor Defense and Port Security which are critical to strategic mobility.

Section 507 of the National Defense Authorization Act for 1988 and 1989 expressed the concern of the Congress in this vein and required submission of a ten year plan to enable the Coast Guard to meet 95% of its wartime mobilization requirements for Selected Reserve strength, recruiting and training resources, and equipment and logistic support. The President's Budget for 1989 proposes a funding level that will permit the Coast Guard Selected Reserve to grow back to 13,000 by the end of the year. I believe it imperative to National Defense planning that this partial restoration of Coast Guard Reserve strength receive your support in the Fiscal Year 1989 authorization and appropriation process.

National Guard and Reserve Equipment

During FY 1987, the Department of Defense and the Services continued to improve the equipment status of the National Guard and Reserve Forces. The impact of DoD and Congressional funding of Reserve component equipment in recent years is being reflected in both improved capabilities and equipment fill rates.

Our FY 1989 report to the Congress on the status of National Guard and Reserve equipment, which is based on a representative sampling of 1,443 major line items of Reserve component equipment, shows that equipment valued at $9.9 billion was delivered to National Guard and Reserve Forces during FY 1987. This included 286 aircraft, 231 helicopters, four ships, 740 tanks, 72 howitzers, and more than 12,000 tactical and support vehicles. Current projections from this report also indicate a continued high, albeit declining in the out-years, level of distribution to the Reserve components, averaging $8 billion annually over the next four years.

Based on this representative sample, if the National Guard and Reserve forces were mobilized at the beginning of FY 1989, they would be able to field approximately 80 percent of their required equipment, in terms of dollar value. Through the use of available substitute items, this capability could be raised to approximately 84 percent.

The outlook for further progress in reducing National Guard and Reserve equipment shortfalls is becoming increasingly uncertain in light of evolving budgetary constraints. Overall Service planned procurement for FY 1989 is down by more than $14.0 billion compared to that planned for FY 1989 in the President's Budget last year. This reduction, which exceeds 15 percent, will adversely impact the equipment status of the Reserve components in two ways -- first, in reduced funding for new procurements specifically for the Reserves and, second, through a reduced flow of combat serviceable equipment from the Active components.

Current Service plans for Reserve component equipment procurement are contained in the Department's P-1R report which accompanies the President's Budget. It reflects the types, quantities and costs of equipment items proposed for procurement for the Reserve components. The report identifies equipment procurement of $2.3 billion in FY 1989 for the National Guard and Reserve, a reduction of 7 percent compared to that planned for FY 1989 in the last year's President's Budget.

The Department of the Army has requested $1.3 billion in FY 1989 for procurement for Army Reserve components. The request includes $1.0 billion for Army National Guard procurement and $276 million for Army Reserve procurement.

The Department of the Navy has requested $189 million for procurement of Naval Reserve and Marine Corps Reserve equipment. The Navy's request includes $44 million for Marine Corps Reserve procurement and approximately $145 million for Naval Reserve procurement.

The Department of the Air Force has requested $869 million in FY 1989 for its Reserve components. The Air Force request includes $657 million for the Air National Guard procurement and $212 million for Air Force Reserve procurement.

Even if we achieve one hundred percent of our current equipment redistribution and procurement plans, equipment shortfalls will remain. Data from our FY 1989 National Guard and Reserve Equipment Report indicates a shortfall at the end of FY 1991 of approximately $7 billion. While this is a significant improvement over the $10-11 billion mobilization shortfall forecast last year, further progress in closing the gap between equipment-on-hand and wartime requirement is becoming increasingly difficult, given the greater competition for limited budget resources. Force structure adjustments made necessary by reduced resource levels may also have a significant impact on the pace of future progress in eliminating this deficit.

National Guard and Reserve Facilities

Maintenance of our present and future facilities remains one of our high priorities. For repair and maintenance of Reserve component facilities, we have requested $582 million within the operation and maintenance budget. These funds reflect a reduction of $82 million from the FY 88 funding level. Program affordability cutbacks, particularly in the Army Reserve components, means that the backlog of maintenance will continue to grow as needed repairs are deferred.

We have requested $473 million for Reserve component Military Construction. This represents a reduction of over $111 million from the FY 88 request and $49 million from the previously authorized FY 89 level. Affordability requirements have dictated that the Services carefully review all new construction requests to ensure they support new weapon systems or force structure, improve readiness and mission accomplishment and/or permit realistic training. Many renewal and replacement projects have been deferred until the 1990's.

We are pleased to report that management initiatives taken as part of our oversight of the Reserve component facilities programs, produced (for FY 1987) a first year major construction project award execution rate of over 97 percent of the program, the highest in the Department of Defense. The efforts and coordinated actions of my staff, the Reserve component military construction program managers, and the execution agents have provided needed facilities to the National Guard and Reserves in the shortest possible time.

Employer Support

The work of the National Committee for Employer Support of the Guard and Reserve (NCESGR) is becoming increasingly important, and it has been the focus of a great deal of my personal attention since I assumed office. Grass roots organizations of volunteer business, labor, civic, and local military leaders are being developed in all fifty states, the District of Columbia, Puerto Rico, the Virgin Islands, Guam, and the Commonwealth of the Northern Mariana Islands. The number of volunteers now exceeds 3,500.

Employer pressures on drilling National Guardsmen and Reservists are common. As Guardsmen and Reservists are asked to assume even greater responsibilities, the periods of absence from the work place increase and so do employer pressures. It is anticipated that during this next year, approximately one-third of our Guardsmen and Reservists who are within their first five years of service will quit because of employer pressures. The substantial costs of training replacements make it essential that we relieve those pressures. Several steps have been taken in recent months.

In August, 1987, the Secretary of Defense appointed a prominent corporate executive, John G. McElwee, as the new volunteer Chairman of the National Committee. Mr. McElwee, who recently retired as the Chief Executive Officer of the John Hancock Mutual Life Insurance Company, is a retired Naval Reserve Officer with combat aviation experience in World War II. His varied experiences as both a successful business executive and a commander of Naval Reserve units make him ideally suited to assume his new role in reaching out to business and corporate leaders.

In September, 1987, a National Conference of the leaders of all of the states and territories was held in Washington, D.C. Key members of Congress and senior Administration officials participated. The President produced a video taped message to NCESGR volunteers and employers.

I have recently implemented several new management initiatives to invigorate and focus NCESGR's efforts. A nationwide public service advertising program in cooperation with The Advertising Council has also been renewed. During the past year, the value of the NCESGR-Advertising Council media spot announcements surpassed $35 million dollars.

Some 42 "Bosslifts" were also conducted by NCESGR last year. Each bosslift gave 40 employers an opportunity to receive briefings from Department of Defense agencies on the role of the National Guard and Reserve within the Total Force and to observe reserve training at such locations as the National Training Center, California; Nellis Air Force Base, Nevada; and Fort Carson, Colorado.

NCESGR's Ombudsman operation continues to serve as a clearing house to receive and informally mediate complaints, provide guidance, and resolve disputes with employers and managers. This effort is coordinated closely with the staff of the Department of Labor through a mutually supportive working relationship at all levels. In 1987, NCESGR's national ombudsman staff acted on more than 5,400 inquiries/complaints. Additional reservist employment problems were handled locally by state committee ombudsmen.

Legislative Proposal

I urge the Congress to enact the Reserve Officer Personnel Management Act (ROPMA), a proposal which has been included in previous legislative proposals submitted by the Administration. This important tool would resolve certain critical management problems within the Reserve components.

ROPMA would be the first comprehensive revision to the Reserve Officer Personnel Act (ROPA), which was enacted in 1954. That Act has provided the basis for appointment and career management of reserve officers for some thirty-three years. Piecemeal adjustments to ROPA have been made over the years and a number of those require periodic renewal.

ROPMA is designed to provide a visible, uniform, and improved officer personnel management system for reserve officers on the reserve active status list and consistent and equitable treatment of officers who are transferring to and from the reserve active status list and the active duty list. It is patterned closely after the Defense Officer Personnel Management Act, which was enacted in 1980. The enactment of ROPMA would revise the laws governing reserve appointments, promotions, separations, and transfers to the Retired Reserve. It would stimulate the type of long-range planning which is essential to providing reserve officers with attractive and meaningful careers, and which is necessary to attract and retain officers of the proper age and grade who possess the skills and experience needed by our Reserve components. I hope that you will act on this important management tool as quickly as possible.

Summary

There is no doubt that the readiness and war-fighting capability of the Reserve components of the United States Armed Forces have improved in recent years. Today, our Reserve Forces include more qualified people, who work with better equipment, and who receive more realistic training, than at any previous time in our nation's history. Our implementation of an effective Total Force Policy, however, necessarily requires that we be relentless in our continued efforts to ensure that the National Guard and Reserve--especially early deploying units--receive and retain sufficient numbers of properly skilled and trained personnel, and sufficient modern equipment, to be ready for combat on short notice. We've made a good start, but much remains to be done.

Mr. Chairman, this completes my statement. Thank you very much for the privilege and opportunity to appear before this committee.

National Guard Bureau

STATEMENT OF LT. GEN. HERBERT R. TEMPLE, JR., CHIEF, NATIONAL GUARD BUREAU

COMMENDATION OF CHAIRMAN STENNIS

Senator Johnston. General Temple?

General Temple. Mr. Chairman, I request that my statement be entered into the record, and I, like Secretary Duncan, regret not seeing Senator Stennis here today with us.

For one who has had the privilege over the past many years to testify before him, I must tell you it will be a great loss to our country and to the military services.

I think you know that in the military establishment we separate our people by uniforms and by medals and by decorations. If the same distinguishing characteristics were applied to the civilian sector and we were all standing next to Senator Stennis for his contributions to our country, we would all look like recruits.

I often recall the comments he has made in this room before about the first military person he ever saw, and he referred to him as a soldier boy, and how straight he stood, and what pride he took in seeing him. Now, that soldier boy was a National Guardsman.

Senator Stennis often remarked that he had watched his National Guardsmen march off to fight our Nation's battles over the course of years, and he took great pride in that, and he said I will never forget it.

Mr. Chairman, he never forgot it. He has never forgotten us. Our Nation, our military services, the National Guard are grateful for what he has contributed to us. Sir, he will be missed, and I want this committee to know that those of us who have had an opportunity to come here for the past few years are better off for his having come our way.

I have no further statement to make, sir.

[The prepared statement of General Temple follows:]

STATEMENT BY
LIEUTENANT GENERAL HERBERT R. TEMPLE, JR.
CHIEF, NATIONAL GUARD BUREAU
DEPARTMENTS OF THE ARMY
AND THE AIR FORCE

INTRODUCTION

As Chief of the National Guard Bureau representing more than one-half million members of the Army and Air National Guard, I appreciate the opportunity to appear before Committees of the Congress and to both inform you of our progress and to express our sincere thanks for your support which has made the Guard's remarkable success possible.

The National Guard is our country's oldest military institution. For over three and a half centuries, citizen soldiers have served proudly in our nation's defense. Initially formed to provide for the common defense of early settlers, the National Guard has grown in size and assumed more responsibilities as the nation has grown and changed. The rather dramatic changes in the past decade, however, are equal to all changes in the previous 340 years. With the Total Force Policy becoming reality, the Guard is now fully integrated into all defense scenarios and is a full partner in America's first line of defense.

Many Americans still think of the National Guard as only a state militia employed in local emergencies and disasters. While our state mission does require answering the call of the Governors and responding to emergencies in the states and territories to assist in the preservation and protection of life, property, and public order, the Army and Air National Guard are undisputedly a major portion of the U.S. conventional defense capability.

STATE MISSION

Our state mission of responding to requests from the respective Governors for assistance continues at an increasingly high level. During calendar year 1987 (CY 1987), personnel of the Army and Air National Guard significantly increased assistance to Federal, State and local drug/law enforcement agencies in the war against the growth of illicit drugs in the United States, and the influx of those drugs across our borders. More than 375 missions were conducted, consisting of aerial observation and reporting marijuana locations, air and surface transportation of law enforcement officials, radar and visual surveillance of suspected drug trafficking aircraft and vessels, and loans of specialized equipment. These missions involved over 1,500 personnel from 25 states, and used almost 9,000 mandays. These missions are performed either in State status or incidental to Federal training periods.

FEDERAL MISSION

Our primary (federal) mission is to be able to mobilize units of properly trained and equipped personnel. As our country's vital interests are no longer limited by our national borders, but are global, we must demonstrate our resolve and our capability to protect our nation's interests wherever they are. Two ways that the Guard prepares for this mission are through Overseas Deployment Training and participation in various exercises. We appreciate our training at sites within the United States and its Territories and fully intend to conduct the major portion of our training at CONUS installations. However, we are an integral part of the Total Force and can expect to be called upon to defend our interests throughout the world. We must train in far-flung locations to acquire the ability to mobilize, move, deploy, sustain our forces and maintain our equipment as a creditable deterrent force. Such deployments are quite beneficial in developing a professional, disciplined military organization.

To enhance our ability to effectively respond to our Federal mission, Army and Air Guard units continued to be deployed worldwide in the past year. Our involvement in training, exercises, and deployments throughout the world is a significant factor to our readiness enhancement. Overseas Deployment Training (ODT) provides the Army National Guard (ARNG) soldier the opportunity to learn about the unit's mission and the operating procedures of their wartime gaining command. Units conduct mobilization, deployment, reception planning and training. Unit readiness is improved by participation of units/cells in CONUS unilateral, joint, and combined exercises. Units and cells selected for ODT are identified by the Time-Phased Force Development List (TPFDL) and the CAPSTONE alignment with the active forces. The ODT plan for 1988 is for participation of 1,407 units/cells and 41,716 personnel.

The Air National Guard (ANG) is a full partner with other active and reserve components in overseas deployments, JCS exercises, Air Force training exercises, and ANG sponsored Composite Force Training exercises. A trend of increased ANG participation in joint exercises has enriched training and readiness. The ANG overseas deployments move entire units to theater locations throughout the world for short periods of time. These deployments provide realistic, valuable, theater specific training. Since airlift costs account for more than 90 percent of deployment costs, the ANG has exercised several deployment concepts in order to maximize its training dollars. Using multi-unit deployments, the ANG has reduced per unit airlift costs by 20-25 percent. Use of dual-role KC-10s (air refueling and airlift) also reduced the overall deployment cost.

The Air Guard also supports the Army in exercises throughout the world. Joint training programs, such as at the National Training Center, Fort Irwin, California, and the Joint Readiness Training Center, Fort Chaffee, Arkansas, provide joint training experience for both the Army and Air National Guard. To sharpen ANG fighting skills and familiarize our ANG personnel with joint operations, Composite Force Training exercises are conducted throughout the year. These exercises are sponsored and planned by Air Guard flying units, Field Training Sites, and active Air Force units. These exercises encompass all mission areas of the Air Guard and are developed for the specific purpose of providing realistic training for all participants.

Deterrence and readiness are keys to our success in performing our federal mission. During his first term, George Washington, a former Colonel in the Virginia militia said, "The only probable means of preventing insult or hostility for any length of time and from being exempted from the calamities of war, is to put the national militia in such a condition as they may appear truly respectable in the eyes of our friends and formidable to those who would otherwise become our enemies." In today's language, this translates to deterrence. Deterrence is the most fundamental element of our defense policy and the cornerstone of our alliance relationships. Deterrence must not only prevent conventional and nuclear attack on the United States, but must extend such protection to our allies. As you know, JCS defines deterrence as the prevention from action by fear of the consequences. Deterrence is a state of mind brought about by the existence of a credible threat of unacceptable counteraction.

While our way of life clearly supports the deterrence concept, we must be ever vigilant and always capable of fighting and winning. Our Guard soldiers and airmen must be fit to fight, trained to use the equipment provided, and taught to sustain themselves in a hostile environment. Our equipment must be state-of-the-art, able to destroy the enemy as well as to protect our troops. Our units must attain the maximum readiness level and must be prepared to fill their defense roles on a moment's notice. As you know readiness is the ability of forces, units, weapons, systems, or equipment to deliver the outputs for which they were designed, including the ability to deploy and employ without unacceptable delays. In this light, the real value of Army and Air Guard participation in OCONUS training is readily apparent and contributes significantly to our ability to achieve a specified wartime objective.

TODAY'S NATIONAL GUARD

The Guard today is better manned, better trained, and better equipped than ever in its long history. Congress has placed great faith and trust in us and has provided much assistance in our manning, training, and equipping. We have been asked to accept additional missions and responsibilities and have responded well to these challenges. Our efforts to recruit and retain a high quality, professional, and dedicated force have paid dividends.

The Air National Guard and Army National Guard have consistently been number one and two, respectively, in retention rates among Reserve Components. In FY 87, the ANG retention rate was 89.6 and the ARNG retention rate was 83.5. As a direct result of these excellent retention rates and aggressive recruiting programs both the Air and Army National Guard were able to reach their highest strength levels ever.

We in leadership must continue to provide these soldiers with the very best equipment and quality training to ensure their survival should they be required to defend this nation. We have done well, but there is room for improvement.

We, as well as all Americans, must recognize that security is not cheap. Air Force Secretary Edward C. Alridge, Jr., has said "The reality is that defense spending alone has not caused the federal deficit nor will gutting the defense budget solve the deficit." The fact is that Reserve Forces are a bargain, but they cannot do it alone. The active forces are needed more than ever; the Active and Reserve Components must be fully integrated into training, equipment, and systems. The requirement to equip and train our Reserve forces exists because of the necessity of those forces to be fully combat ready. They must be ready to stand alone or integrate fully with their active duty counterparts.

EQUIPMENT

Although the Department of the Army continued the modernization of the ARNG by distributing over $2 billion worth of equipment to the ARNG in FY 87 and projects additional deliveries of $1.8 billion in FY 88, we continue to have shortfalls. Our equipment is getting more use in the extensive training environment and due to its age, requires more and more maintenance. We have gained much but still there are needs. The most limiting readiness factor in the ANG is equipment, especially the need for modern equipment. We appreciate the pronounced interest Congress has taken over the past several years in supporting the Guard and Reserve forces by providing additional procurement funding. Through this specifically approved funding the Air Guard has been able to buy new C-130s, new operational support aircraft, and, in FY 88, new MH-60 helicopters for our rescue and recovery units. Miscellaneous equipment monies have provided the Air Guard with more modern communications equipment, needed medical equipment, safety equipment, and training devices such as the Air Combat Maneuvering Instrumentation.

Shortages in major items of weapons, support equipment, and communications equipment degrade equipment-on-hand readiness and capabilities of units in the ARNG. Although the distribution of equipment from Army procurement and Congressionally dedicated procurement funding has continually grown, growth in force structure requirements often offset these gains. Some examples of remaining critical ARNG equipment shortages are: personnel carriers, 5-ton trucks, tactical FM radios, and M198 Howitzers just to mention a few.

The total value of ARNG mobilization equipment requirements at the beginning of FY 88 is 31 billion dollars. Receipt of equipment in FY 87 improved the mobilization equipment fill rate to 72 percent, compared to 66 percent in the previous year.

OUR NEEDS

Peacetime demands upon our members are unparalled, and each of our soldiers and airmen must consider the additional demands of job, family, home responsibilities and educational requirements. Limited time is an important factor we must consider; fully-trained and experienced full-time support (FTS) personnel are our way of compensating for guardmembers' limited time availability. The request I present to you in the President's Budget for military technicians and Active/Guard Reserve (AGR) growth has been pared down to meet the constrained resource levels mandated to balance the budget. In order to meet the reductions allocated to the Army and Air Force and, therefore, to the Army National Guard and Air National Guard, I am unable to fund any growth in end-strengths for technicians or AGRs in the Army Guard and only 112 AGR for the Air Guard. Full-time manning continues to be our highest priority and is urgently needed for us to carry out the training and operational missions we have been asked to accept. While the FTS on the Army side remains constant, requirements based on new activations have increased by almost 2,500 spaces. When faced with the choice of ensuring the units we have are effectively trained and manned or to expand to additional units and strength, our first responsibility must be to the total force we now have.

The National Guard needs continued support and emphasis on benefits to make National Guard service attractive. Incentive Programs are a must. The Army Continuing Education System (ACES) provides various educational opportunities to enlisted soldiers and commissioned officers who attend school part-time (e.g., high school completion and part-time post-secondary school) and are not covered by the Montgomery GI Bill. Commissioned officers incur a four year Selected Reserve service obligation following the last ACES supported class.

The Montgomery GI Bill is a most valuable entitlement and provides benefits to our soldiers and airmen who are attending undergraduate college on a half-time or more basis. Presently, the ARNG has over 92,000 members and the ANG has over 40,000 members who meet basic entitlement requirements. The Veterans Administration reports 32,000 ARNG members and 11,000 ANG members are receiving benefits to date. Our participation is expected to increase.

ACES provides tuition assistance to soldiers who attend college on a less than half-time basis as well as many low-cost high-impact educational opportunities that the Montgomery GI Bill doesn't cover (e.g., high school completion, college credit by examination, and college credit by evaluation). These two programs complement each other in covering the educational spectrum and are very useful. We continue to need them.

In addition to the MGIB, the ANG offers incentives in the bonus and student loan repayment programs. These programs provide cash incentives and assistance in repaying qualified, federally insured student loans to members who enlist or reenlist in identified critical skills. Other benefits, such as the Community College of the Air Force and free College Level Examination Program (CLEP) and Defense Activity for Non-Traditional Educational Support (DANTES) testing, are also available. These programs have proven to be effective tools for recruiting ANG members. As retention tools, these programs save the government substantial funds by reducing training costs associated with bringing new and untrained personnel into the Air Guard. Collectively, the entitlements and incentives promote recruitment and retention of trained and experienced ANG members and must be continued.

The Selected Reserve Incentive Program (SRIP) provides enlistment bonuses that may be either a $2,000 critical skill or $1,500 unit bonus. Additionally, the program offers the retention bonus, affiliation bonus, the Student Loan Repayment Program, and the Health Professionals Loan Repayment Program. Current authority expires September 1990.

To support the Air National Guard training needs, we must look to the professional military training schools and technical training schools. These two separate areas provide training in our wartime tasks, Air Force Specialty Code (AFSC) qualifications and in the area of Professional Military Education, leadership training, and advanced management courses. The Air National Guard receives formal technical training for wartime skills, through a combination of Air Force formal schools and unit on-the-job training. This combination provides a well-rounded, trained individual who can rapidly be mobilized and deployed. Our limiting factors are the availability of the traditional guardsman, and the military personnel resources (currently costing more than $60 million annually) that provide the school days. We must constantly prioritize the level of training available for the new missions and equipment due to limited resources Along with the technical training there is a need for Professional Military Education. This provides for the development of leadership skills and increases the management capabilities of the Air National Guard officers and noncommissioned officers (NCOs). We need to maintain the current level of funding in the military personnel training accounts to pay for these school days. Unfortunately, to meet our required FY 89 budget reductions, the ANG had to significantly reduce the funds that support our training.

Budgetary constraints have reduced the number of hours available in the ARNG FY 88/89 Flying Hours Program (FHP). Funding will support 360,000 hours in FY 88 and 341,000 in FY 89. Modernization and force structure changes are the most significant variables in the FHP. The FY 89 budget falls short of funding the 365,000 hours needed to meet aircrew training minimum requirements. Under these circumstances, aviation units will experience reduced training readiness because of a shortage in flying hours.

MOS Qualification in the ARNG is another area of concern. A significant number of prior service personnel, interstate transfers, and individuals transferring between units do not have a MOS match in the positions to which assigned. We have a number of programs designed to qualify our soldiers in their job skills as soon as practical. Whether gained through resident service schools, non-resident schools using courses tailored to our training environment, or absent either of these, supervised-on-the-job-training, MOS qualification is a major challenge the Guard faces. The challenge to MOS qualify our personnel is resource intensive and we must have the funds required to insure that our soldiers are sufficiently prepared to serve effectively.

SUMMARY

The National Guard has proven to be an integral part of the Total Force. We exist to support U.S. foreign policy and national security objectives, while providing a State militia uniquely qualified for local disaster and public safety needs. Our responsibilities are truly global, national and local. Each offers its own set of challenges for the present and the future. We are ready to meet these challenges. The capability of our soldiers and airmen to respond to the most demanding wartime missions is a matter of record. The Secretary of the Army, the Honorable John O. Marsh, has said, "Our Reserve and National Guard components, upon which we rely so heavily, prove their readiness daily in challenging assignments around the world."

Placing additional force structure and missions in the National Guard is economically sound, but it must be done carefully as the commensurate levels of support, including manpower and equipment, are required as the missions are transferred. We appreciate the continuing strong support and confidence of the Congress. Your support has permitted the National Guard to continue modernization and to make significant progress toward our goal of strength through readiness.

LIEUTENANT GENERAL HERBERT R. TEMPLE, JR.
CHIEF, NATIONAL GUARD BUREAU

General Temple began his military career as a private in the 160th Infantry Regiment (Los Angeles' Own), 40th Infantry Division, California National Guard, on June 2, 1947. He was called to active duty in September 1950 and served in Korea as a non-commissioned officer with Company B, 5th Regimental Combat Team, 24th Infantry Division. After his return to the United States, he was discharged from the Army on May 23, 1952, and subsequently rejoined the 160th Infantry Regiment. On October 20, 1952, he received a direct appointment as a second lieutenant in the California Army National Guard and was assigned as a Platoon Leader in the 160th Infantry Regiment. From April 1953 to June 1954, he commanded Company C of the regiment. Subsequent assignments were as Liaison Officer and Combat Command Motor Officer until October 1955, when he was assigned as Company Commander, Headquarters and Headquarters Company, Combat Command A, 40th Armored Division. He was assigned as Headquarters Commandant of the division in November 1959. He then served as Assistant G-1 (Personnel) and Acting G-1, 40th Armored Division and S-1

(Personnel) of the 40th Division Support Command until his assignment in September 1966 as Commander of the 40th Supply and Transportation Battalion. In September 1967, he became Commander of 3d Battalion, 160th Infantry, 40th Infantry Brigade (Separate).

He attended the United States Army War College from July 1974 to May 1975. After receiving his Masters Degree in public administration, he reported to the National Guard Bureau in September 1975 as the Chief, Office of Mobilization Readiness until June 1976 when he became Chief, Office of Policy and Congressional Liaison. On October 1, 1978, he was promoted to brigadier general and named Deputy Director, Army National Guard. He was appointed as the Director, Army National Guard, and federally recognized as a major general on August 19, 1982. Four years later he was appointed as the Chief, National Guard Bureau and promoted to lieutenant general.

General Temple is the former Vice President and part owner of V. B. Morgan Trucking Company of Long Beach, California. From 1971 to 1974, he served on the Staff of the Governor of California, as the Director of the California Office of Emergency Services, with responsibility for statewide emergency planning, coordination, and communications.

His awards and decorations include the Distinguished Service Medal, Legion of Merit, Meritorious Service Medal, Army and Air Force Commendation Medals, Good Conduct Medal, Korean Service Medal with one Bronze Service Star, Combat Infantryman Badge, Army Staff Identification Badge, and numerous other decorations.

ARMY NATIONAL GUARD

STATEMENT OF MAJ. GEN. DONALD BURDICK, DIRECTOR, ARMY NATIONAL GUARD

COMMENDATION TO SENATOR STENNIS

Senator JOHNSTON. General Burdick?

General BURDICK. Mr. Chairman and distinguished members of the committee, I am Major General Donald Burdick, Director of the Army National Guard. I am pleased to appear before you today to discuss the programs of our Army National Guard, and wish to express to you, Mr. Chairman, and particularly to Senator Stennis, the sincere thanks of some 452,000 Army National Guardsmen and women for the support that this committee and the Chairman, Senator Stennis, have provided to the Army National Guard over the years.

Certainly without your support—and it has been outstanding support—we could not have attained the combat ready situation that we are in today in the Army National Guard.

So on behalf of all our soldiers, men and women, I would like to thank you and the Chairman.

I have a statement I wish to submit for the record, and with your permission, I would like to comment briefly on certain aspects of that statement.

COMBAT READY GUARD

As I mentioned, because of the concern of this committee and your providing increased support over the years, the role of the Army National Guard in our Nation's defense has taken on new meaning.

The Guard is not the Guard it was several years ago, a Guard that required months to equip and train before being judged combat ready. Today's Army National Guard is a combat ready Guard, an army on call. However, it appears that just as we were beginning to become a really cost-effective deterrent, the Guard may now be required to take on new direction toward accomplishing this vital mission, a direction driven by an atmosphere of constrained resources.

CURRENT STRENGTH OF NATIONAL GUARD

I would like to point out to you some of my concerns that I have for the Guard's ability to function in such a constrained environment. The strength of our Army National Guard has grown from some 367,000 in fiscal year 1980 to 457,000 in fiscal year 1988. This increase in strength has paralleled the increase in new missions given to the Guard as the Guard's role in our Nation's defense has also increased. However, in fiscal year 1989, our strength is frozen at fiscal year 1988 levels. This complies with the guidance received to reduce the deficit and move toward a balanced budget. Force structure, however, continues to grow.

FULL-TIME SUPPORT PROGRAM

A second concern centers around the Guard's full time support program. In recent years, growth in the Active Guard/Reserve program and the military technician force, has also paralleled the growth in our new missions. Again, for fiscal year 1989, full time support is frozen at fiscal year 1988 levels. This leaves us some 11,000 Active Guard/Reservists short and over 7,800 technicians short of identified requirements.

These full time individuals have been and are the key to the National Guard's ability to sustain the levels of combat readiness that we have achieved over the past years. The freeze in Active Guard/Reserve growth in particular is made more critical in fiscal year 1989 by a loss of some 312 work-years from fiscal year 1988 levels. This came about in the Budget Reconciliation Act to pay FICA taxes on inactive duty training pay and has forced us to reduce our work year levels to pay for this $12 million encumbrance.

O&M BUDGET

Our third concern centers around our operations and maintenance budget. This is the heart of the day-to-day business of the Guard. It pays for such items as telephone bills for our armories, parts for our vehicles, tool sets, clothing, bayonets, our military technician personnel, etc. The effectiveness of our units is severely hampered if we do not have sufficient operation and maintenance funds.

NEGATIVE REAL GROWTH

The largest part of the negative growth—and we have had a negative real growth of almost $100 million in this area—impacts on our logistical and base operations. In simple terms, we will be able to buy less of virtually everything that is paid for out of the operations and maintenance appropriation. And this again comes at a time when increased missions are being asked of the National Guard.

RECRUITING PROGRAMS

Finally, in the past few years, our recruiting program for members of the Selected Reserve has been very successful. One reason for this has been the SRIP program, or the Selected Reserve Incentive Program, that program that provides bonuses and other incentives to individuals that are recruited into the Guard. The problem is that in the last 2 or 3 years we have only received the program for a finite period of time. Every time the approval expires, as was the case in 1985 and again in 1987, several months goes by before the program is subsequently renewed. Each time there is a gap, and this has had a very disruptive effect on enlistments and extensions in the Army National Guard.

In fact, this year we are some 3,000 below program in our recruiting effort right now. We will make this up, but it is a very difficult thing to do, and it places a great deal of stress on our recruiting effort.

I want to assure you, sir, and this committee that the Guard will work hard to achieve the best state of readiness consistent with the funding provided in the fiscal year 1989 budget.

As I said in the beginning, we appreciate the support of Senator Stennis and this committee and look forward to your continued support in the future to help us maintain the high state of combat readiness that we have been able to achieve in the last few years.

Thank you, sir.

[The prepared statement of General Burdick follows:]

PREPARED STATEMENT OF MAJ. GEN. DONALD BURDICK

DIRECTOR

ARMY NATIONAL GUARD

INTRODUCTION

Throughout our nation's history the citizen soldier has been essential to the security and preservation of our country's security and freedom. Colonial minutemen lived with the reality that they might have to leave the peace and tranquillity of their homes for the battlefield with little or no training and only their personal weapons. In contrast, modern day minutemen - National Guardsmen - are much better trained and equipped.

When the Total Force Concept became a reality in the early 1980's, new missions were given to the Guard and it began to receive modern equipment. Guard leaders focused on improving combat readiness so that Guard units might effectively respond when needed, fight, if necessary, and win decisively. Unlike the Guard of WWII and Korea which required months of training and equipping before being judged combat ready, today's Guard is a combat ready force. Although much progress has been made in resourcing the Guard, there is still much to be accomplished. For example, the Guard's equipment modernization program is still to be completed. Also, there is still a need for additional full-time support - AGR's and military technicians. In this period of budgetary constraint, it is important that the Guard be adequately resourced so that it can continue to fulfill its new role in our nation's defense - that of a well-trained, well-equipped, cost-effective "Army on Call."

STATE MISSION

In 1987, Army National Guard support to civil authorities continued at an impressive level. Support was provided to 52 states during 428 separate emergencies. Included in this total were both civil disturbance operations and recovery operations following floods, tornados, hurricanes, and other natural disasters. In addition, the Guard continued to provide humanitarian support by conducting search and rescue operations, supplying emergency power and water to communities, providing temporary shelter for the homeless, and evacuating critically ill and injured people. Support to civil authorities involved in drug operations also continued to increase. Compared to 1986, the number of states involved in drug operations increased from 19 to 25. As a result of this involvement, 1,029,421 marijuana plants were destroyed and 5,383 pounds of cocaine were confiscated. This equates to over $559,444,000 in illegal drugs that will not reach the streets of this country.

FEDERAL MISSION

ORGANIZING THE GUARD

Force structure is dictated by "the threat" and mission requirements and is what drives the organization/conversion of Guard units. Strength, equipment, and training requirements are a few of the things that are mandated by force structure and the assignment of new Guard units. In FY 87 the Army National Guard (ARNG) experienced many changes in its force structure. Numerous conversions to the Army of Excellence (AOE) design occurred to meet total Army requirements. These conversions and activations will continue in the future to meet the threat as determined by the Department of the Army. Some of these actions and plans are cited below.

In FY 87, these major actions occurred.

At corps level, six attack helicopter battalions (five Cobra and one Apache) and four assault helicopter battalions were formed.

The only TOW Light Anti-tank Battalions (TLAT) in the Army were modernized by receiving authorization for the new High Mobility Multi-purpose Wheeled Vehicles (HMMWV's).

The modernization of two ARNG armor and four mechanized infantry separate brigades and the conversion of two Armored Cavalry Regiments (ACR) also occurred in FY 87. ACRs are now reorganized to the Division 86 configuration and each has activated a support squadron. Additionally, aviation assets in ACRs were consolidated into regimental aviation squadrons.

One Air Defense Artillery (ADA) battalion (HAWK) was activated during FY 87 and the modernization of "Duster" units to Chaparral continued with a second battalion being converted. Additional air defense actions begun in FY 87 are scheduled for completion in FY 92. These actions will establish seven Chaparral battalions by converting two additional M42A1 Duster battalions and by activating two full battalions and one battalion minus. This will enhance the existing ARNG Air Defense structure which currently consists of six M42A1 Duster battalions, two Chaparral battalions, one Air Defense Brigade Headquarters Battery, and six Aerial Target Detachments.

FY 88 force structure actions are concentrating on echelons above division. A few of the major actions include the following.

A Multiple Launch Rocket System (MLRS) Battalion will be activated, the first unit of its kind in the ARNG.

Utah's 142nd Linguist Battalion will expand and convert in FY 88 from a TDA to an MTOE organization. The new 142d Linguist Group is composed of a Group Headquarters and two battalions, located in Utah.

Three Mobile Army Surgical Hospitals (MASH) and one evacuation hospital will be activated.

ARNG engineer topographic units will implement a new design under the "L" series Table of Organization and Equipment (TOE).

Finally, several Personnel Service Companies (PSC) will be established at Corps level which will offset the elimination of AG Companies within divisions and brigades.

In FY 89, conversions and activations of Guard units continue. The major ones involve aviation, chemical, and artillery units.

The conversion of aviation units to Army of Excellence design will see Corps and Theater organizations completed by FY 89. In FY 89 units will continue to be programmed to the "L" series design particularly in the divisional aviation structure. As a result, five aviation group headquarters will be established at Corps to command and control the attack battalions within those organizations.

Four chemical companies and two chemical battalion headquarters also are programmed for activation.

Additionally, two armored cavalry regiments will convert to heavy armored brigades.

Finally, field artillery battalions are scheduled for redesign from three batteries of six guns each to three batteries of eight guns each. This enhancement will substantially increase firepower.

MANNING THE GUARD

The strength of the Army National Guard continues to increase. For example, in the past eight years over 90,000 soldiers have been added to the the ARNG. However, in an environment of "constrained resources," the ARNG must work even more effectively to maintain strength. This means that qualified soldiers must be retained.

Enlisted Management Programs

The constraints of fiscal and human resources make it clear that we've got to "keep what we've got." During FY 87, the ARNG achieved an enlisted loss rate of less than 20%. Realizing that sound internal management of attrition will increase readiness through the reduction of personnel turbulence and the maintenance of a trained force, a concentrated effort was made to improve the collection and analysis of data and information to determine who and why individuals leave the ARNG. Significant progress was made in this area. Consequently, ARNG leaders and managers will be able to use insights gained from this data to make more informed decisions about factors which help or hinder the attrition environment.

Officer Management Programs

The need to fill officer positions in the ARNG also remains an important concern. While the budgeted officer strength was met in FY 87, the ARNG must still grow by almost 4,000 to meet officer force structure requirements in FY 89. However, as a result of budget constraints, the ARNG officer corps is programmed to drop from a 95% fill in FY 87 to a 92% fill in FY 89.

Recruiting

Recruiting efforts conducted nationwide have produced positive results.

Stability, effective leadership, and good management practices are key factors in the support of a well trained and highly motivated recruiting force. However, the constrained resources of FY 89 will affect accessions by reducing support funding. This means that individual recruiter enlistment ratios will have to increase to compensate for this loss. The Guard Accession Information System (GAINS) could reduce the amount of support dollars necessary to effect an enlistment, but, budget constraints in FY 88 will slow the progress of this vital automated communications link. Additional constraints in FY 89 could cripple this project totally.

The environment of constrained resources in FY 89 has resulted in a freeze in end strength. The Army Guard will grow from 451,858 in FY 87 to 457,200 in FY 88. There, strength will remain frozen through FY 89. All of the growth is programmed to occur in FY 88.

Quality accessions will present a challenge to the ARNG in light of the constrained resources of FY 89. The cut of $1.5 million from the FY 88 level in recruiting support and advertising funds will reduce the ARNG recruiter's ability to reach the targeted, high quality 17 to 21 year old non-prior service individuals.

The Montgomery G I Bill has been instrumental in aiding the recruiting and retention of quality personnel. At the end of FY 87, over 30,000 individuals were receiving benefits from this legislation. This program provides benefits to soldiers who attend undergraduate college on a half-time or more basis. Growth in this program is projected to reach 55,000 by the end of FY 89.

Professional Development Programs

The Army Continuing Education System (ACES) provides various educational opportunities to the ARNG enlisted soldiers, warrant officers, and commissioned officers to meet the Total Army educational goals. The purpose of ACES is to provide educational opportunities to ARNG soldiers who work full-time, attend school part-time, and are not eligible for the Reserve Component GI Bill. If individuals are receiving veterans benefits (any GI Bill) for education they are not authorized to receive ACES benefits. Current budget projections for FY 89 will reduce the program which could cause a loss of officer personnel who have not yet attained the required two years of college.

Non-Commissioned Officer (NCO) training programs continue to provide candidates with opportunities to participate in resident training courses that contain the latest tactics, doctrine, and systems. The Army's ability to field a combat ready force of well trained soldiers requires the graduation and sustainment of RC forces which can, on short notice, deploy, fight and win. Beginning in the first quarter FY 88, the Reserve Component Noncommissioned Officer Education System (RCNCOES) was restructured to include job related tasks in addition to Army leadership, training and battle field survival skills.

The revised RCNCOES consists of three levels of progressive NCO education which provide the necessary knowledge and skills required to train individuals and small units to go to war. The program includes the Primary Leadership Development Course (PLDC), the Basic Noncommissioned Officer Course (BNCOC) and Advanced Noncommissioned Officer Course (ANCOC). We have dedicated extensive resources to provide this training opportunity to all drilling Army Guard personnel.

The number of Army Guard soldiers graduating from RCNCOES courses continues to grow. This is consistent with the increased emphasis of training to a one-army standard and added reliance on RC forces for their role in mobilization and deployment. During FY 87, 35,052 personnel graduated from RCNCOES courses. Current trends indicate that we will train 36,000 in FY 88.

In addition to RCNCOES Courses developed for the citizen soldiers who are unable to leave their civilian vocation for extended periods, we have set professional standards for our full-time NCO workforce which are the same as their active component counterparts. To accomplish these standards, Active Guard/Reserve (AGR) personnel must successfully complete active component NCOES courses appropriate to their current military grade and skill level as a condition of continued employment in the AGR workforce. Military technician personnel must meet the same military education requirements for promotion to the next higher grade as AGR members are required to complete .

This is a career development program which provides educational milestones for the continued development of the ARNG full-time support force. During FY 87 approximately 7,900 AGR and military technician personnel successfully completed active component NCOES courses. It is estimated that 8,500 will complete active component NCOES course in FY 88. This program is providing a highly qualified NCO Corps.

The purpose of the Reserve Component Tank Commanders Course (RCTCC) is to prepare Reserve Component Non-Commissioned Officers and Officers for the duty position of Tank Commander in a tank company or cavalry troop. Students are trained to skill level 3 proficiency on the M60 or M60A3 tank with the ability to instruct crew drills and teach skill level 1 and 2 tasks. The Tank Commanders Course is taught at Gowen Field, Boise, Idaho, on a recurring basis. Seventeen classes are held each year with a capacity of 48 students in each class. Since its beginning, 1,546 Army Guard soldiers have graduated from RCTCC. We expect an additional 600 graduates in FY 88.

The ARNG NCO Battle Skills Course (BSC) was developed to sustain combat skills among our NCOs. BSC is 152 hours of instruction, (15 days), offered on a continuing basis at Camp Robinson, Arkansas. All ARNG NCOs (CPL or higher) are eligible to attend. BSC provides training in the technical and tactical employment of infantry squad and platoon weapons, live fire exercises, the use of supporting weapons available to the infantry squad and platoon, and battlefield survival techniques. More than 5,500 ARNG NCOs have graduated from BSC. We expect an additional 2,300 graduates in FY 88.

Full-time Support Program

In an environment of constrained resources, it is highly likely that defense missions will be shifted from active component units to more cost effective reserve component units. In FY 87 alone, over 80 new units were added to the ARNG structure. The full-time support program provides a cadre of full-time personnel in support of the overall mission of these units and the previously existing units of the Army National Guard. The program includes ARNG AGR soldiers, Army National Guard military technicians, active component soldiers who are assigned to the Army National Guard, and Department of the Army civilians who work at the National Guard Bureau (NGB).

Program growth is the most critical issue facing the program today. Severe limitations on the projected expansion of the AGR force and the National Guard technician force threaten the overall readiness of the ARNG. Additionally, the careers of quality, professional soldiers, needing effective program management, are in jeopardy because of grade level restrictions imposed on the AGR program by the Congress.

New mission requirements and increasingly demanding training require AGR growth in deployable fighting units. The Army Guard request for 1,329 AGRs that was contained in the FY 88 President's Budget was reduced to an authorized growth of only 665 AGRs over the level appropriated for FY 87. Additional funding constraints have reduced the FY 89 AGR growth to zero. This leaves the ARNG over 11,000 AGRs short of validated requirements. An additional action requires that the ARNG fund from its own resources its share of FICA taxes now required to be withheld from each soldier's drill pay. This has resulted in a reduction of $12 million in FY 89 AGR funding which equates to 612 manyears less than the FY 88 funded level.

Increased quantities of the most modern equipment in the Army's inventory require technician growth in logistical support facilities. The ARNG requested that 491 new technician positions be added during FY 88. Actual growth was 991 technicians. The request for FY 89 was originally for an additional 500 technicians. However, current budget guidelines require that technician strength be maintained at FY 88 levels.

Reliance on the Army Guard as a cost effective segment of the "Total Force" has increased dramatically in recent years. The Full-time Support Program is the framework upon which the strength of the Army National Guard is built. The plan is well conceived, implemented, and managed. Requirements are well documented and must be funded as projected if the Guard is to effectively accomplish its ever expanding mission at minimal cost.

EQUIPPING THE GUARD

Ground Equipment

The Department of the Army distributed equipment worth over $2 billion to the Army National Guard in FY 1987. This included such major systems as

M60A3 Tank Thermal Sights (TTS), Bradley Fighting Vehicles (BFV), Improved TOW Vehicles (ITV), M198 Howitzers, Battery Computer Systems (BCS), Chaparrals and HAWK air defense artillery systems, Heavy Expanded Mobility Tactical Trucks (HEMTT), M923 5 Ton Cargo Trucks, and High Mobility Multi-Purpose Wheeled Vehicles (HMMWV).

In addition to follow-on deliveries of the above mentioned major systems, FY 88 and/or FY 89 distribution will include the M1 Abrams Tank and Firefinder radar. Continued delivery of Force Modernization equipment, in conjunction with an aggressive redistribution program, has resulted in greatly improved equipment-on-hand readiness in the ARNG. The percentage of units reporting minimum deployable status or better for equipment-on-hand increased from 52 percent in FY 1985 to 80 percent in July 1987.

A decision was made to accelerate modernization of the Army National Guard armor force in 1984. By the middle of FY 90 the Army Guard will be totally equipped with either M1 Abrams or M60A3 Tank Thermal Sight (TTS) Tanks. To meet the challenge of training the force, two M60A3 Displaced Equipment Training (DET) sites were activated: one at Gowen Field, Idaho, in December 1985, and the other at Camp Shelby, Mississippi, in August 1986. Each DET site will train seven to eight armor battalions per year over a four year period. A total of 1,084 M60A3 tanks have been fielded as of the end of FY 1987 from a programmed total of 3,050. To date, four M1 battalions have been fielded with three more scheduled for FY 88 and FY 89.

The first Prepositioned Overseas Materiel Configured to Unit Sets (POMCUS)-Uncovered Residual Equipment-Replacement (PURE-Rep) program has been approved for the ARNG. An M1 armor battalion in Kentucky will be incrementally activated in early FY 89 and completed in FY 91. This concept proposes a solution to the equipping dilemma by activating ARNG units whose major pacing items of equipment (M1 tanks and M3 Cavalry Fighting Vehicles) are replaced by PURE assets left by deploying Active Component units upon mobilization.

The Army National Guard continues to have three field artillery modernization goals: first, upgrade the firing capability by replacement or modernization of old weapon systems; second, increase the automation of the fire direction capabilities of all units; and third, optimize the fire support capabilities.

Modernization of artillery weapon systems continues to be a challenge. We anticipated that all M114 series (Pre-Korean War vintage) 155mm Howitzers would be replaced by the M198 (155mm) Howitzers in General Support units. However, funding limitations now require M114 retention in the force for an indefinite period of time. The M109 series 155mm Self-Propelled Howitzers are still projected for fielding, reducing the current shortages by FY 1992. One corps level MLRS battalion is being fielded to the Army National Guard during FY 88-89. However, the Army does not plan to equip the ARNG Divisions with MLRS. Consequently, the nine ARNG divisions will not have the same capability as active component divisions. Army procurement of the British Light Gun (BLG) L119 (105mm) is scheduled to begin in 1st Quarter FY 1988. Fielding of the L119 Howitzers is projected to begin in FY 90 to the ARNG Light Infantry Division and several years later for roundout brigades and selected separate infantry brigades.

Air Defense Equipment

The air defense equipment in ARNG Air Defense Artillery (ADA) Battalions will be modernized as a result of conversions and activations occurring between FY 88 and FY 92. The ARNG currently has six Duster Battalions which will be converted to either Chaparral or Gun/Stinger. The two existing Chaparral battalions will increase to seven due to two conversions (Duster) in FY 88 and FY 89 and three activations from FY 89-90. HAWK Battalions will also increase with the activation of three battalions, two in FY 1990 and one in FY 1991. Gun/Stinger Battalions will replace the four remaining Duster Battalions in FY 1988. Two ADA Battalions, consisting of two Vulcan/Stinger Batteries each, will be activated for the 6th Light Infantry Division in FY 1989 and the 29th Light Infantry Division in FY 1991.

Wheeled Vehicles

Wheeled tactical vehicle shortages continue to be a major problem in ARNG modernization. Medium tactical cargo vehicles are extremely short. To further compound these shortages, the ARNG has approximately 3,000 older model, gasoline powered, 5-ton and 2 1/2-ton trucks. Separate appropriations for the Reserve Components have been used to procure 800 new 5-ton trucks to satisfy a portion of the ARNG shortages. Several other types of wheeled tactical vehicles have reached the age where they are no longer supportable because of a lack of available repair parts. The fielding of large numbers of High Mobility Multi-purpose Wheeled Vehicles (HMMWV) to the ARNG has reduced the number of M151A1 1/4 ton trucks remaining in the ARNG fleet. Receipt of the Heavy Expanded Mobility Tactical Truck (HEMTT) has provided some relief of shortage in the medium and heavy tactical fleet.

Communications-Electronic Equipment

The ARNG has fielded the Decentralized Automated Service Support System (DAS3) to 76 sites within the ARNG. The DAS3 was designed to automate direct support unit (DSU) operations within the divisional and non-divisional environment. The system designated to replace the DAS3 is the Tactical Army Combat Service Support (CSS) Computer System (TACCS). TACCS fielding began in FY 87 and the system has been already fielded to several ARNG sites to automate Class IX and maintenance operations. The ARNG, using a regional training approach, will eventually field about 4,000 TACCS.

Approximately one-third of the funding provided to the ARNG from Congress has been used to modernize equipment in ARNG communications units. Since May 1985, seven of ten ARNG divisional signal battalions have been equipped with multichannel Army Tactical Area Communication Systems (ATACS). The equipment for the remaining three division signal battalions will be fielded by the close of FY 1988.

The ARNG Mobile Subscriber Equipment (MSE) fielding will begin in FY 88 in units assigned to III Corps. The MSE will provide both mobile and wire subscribers a means of exchanging command and control information in a dynamic environment. The MSE increases individual and Command Post mobility and serves dispersed locations as required by Air Land Battle doctrine. The system will greatly enhance US Army combat mobility, survivability and effectiveness. MSE is being resourced for a 26 division (5 corps) force and fielded a complete corps at a time. The proposed training program fully supports a total Army Active Component and Reserve Component (AC and RC) transition to MSE.

Medical/Dental Equipment

Since 1984, the ARNG has invested over $36 million in the modernization of medical and dental equipment sets. Modernization of medical and dental equipment sets will continue in FY 1988. The ARNG expects FY 88 delivery of $13 million of medical and dental equipment sets funded in FY 86.

To increase medical readiness, the ARNG is programmed to receive 25 sets of Deployable Medical Systems (DEPMEDS), i.e. one set per hospital. However, delays in fielding are a major concern. Several units scheduled for later fieldings have already been slipped and it appears that even the initial fielding may also slip.

Organizational Clothing and Equipment

The Organizational Clothing and Equipment (OCE) Program continues to improve as all shortages are being reduced. The fielding of Personnel Armor System, Ground Troop (PASGT) helmet, a $50 million program begun in FY 84, should be successfully concluded in mid FY 88.

In FY 87 ARNG units received or have on order over 55,000 camouflage screens and support sets. Although the authorization for camouflage support sets continues to increase, the ARNG percent of fill for this item increased from 19% at end of FY 85 to 64% at end of FY 87.

Shortages in Chemical Defense Equipment (CDE) continue, as a result of contractor problems. The ARNG requisitioned over 450,000 Battle Dress Overgarments, but has received only 183,000. Consequently the program has slipped by 18 months with 150,000 of required BDO not yet on order. Because of the shortage of contingency BDO, units have not requisitioned all required gloves and footwear covers that complement overgarments to make complete sets.

The fielding of the Combat Vehicle Crewman's (CVC) Uniform System which was scheduled to begin in FY 87 has also slipped to FY 88.

Maintenance Operations

Army National Guard materiel readiness reports reveal an equipment readiness posture that compares favorably with Active Component standards. Increased command emphasis and the implementation of maintenance management initiatives designed to improve maintenance management, operations, and training have allowed the ARNG to achieve and sustain the overall ready condition of our equipment. However, some disturbing trends in non-mission capable equipment readiness could develop. Repair parts funding, which supports the Army Guard's maintenance program, has been significantly reduced for FY 89. This could result in the loss of most of the ARNG's previously gained equipment readiness improvements. The most adverse impact on readiness will be realized when ARNG units consume on-hand repair parts to a near zero balance as they attempt to provide the serviceable equipment needed to support equipment operating levels, training tempos, and assigned readiness goals.

A series of fleet management depot overhaul programs designed to enhance the readiness of ARNG equipment will be fully funded in FY 89. These ARNG depot maintenance programs include the modernization and major overhaul of aircraft, combat vehicles, trucks, radios, and other electronic equipment. The ARNG initiated many new aviation maintenance programs designed to improve the readiness of ARNG aircraft and to enhance the readiness of aviation units. All of these vital maintenance programs will provide the increased reliability and sustainability of ARNG equipment needed to meet assigned materiel readiness goals.

Aviation Equipment

The ARNG aircraft situation is one of critical shortages, particularly in helicopters. In FY 89, the ARNG will have 33 divisional/corps units that require attack helicopters. Of these, the Army has identified ten corps units and five divisional units which require the AH-64 (Apache) Attack helicopter. Current plans call for only 54 to go to Army Guard units. The balance of the requirement, along with the other divisional/corps units needing attack helicopters will be filled with the far less capable AH-1S (Cobra) attack helicopter. When compared to the primary Soviet attack helicopter, "the Soviet HIND-D/E attack helicopters hold a considerable advantage over the Cobra in terms of ordnance capacity, cargo capacity, and armor protection." Additionally, the Army Guard's inventory of Cobra helicopters is contingent upon the fielding of Apaches to the active component. Only as the active component units receive the Apache will their Cobras be displaced to Army Guard units. Forty-three percent of the combat units of the Total Army are resident in the Army Guard, yet the Guard will receive only 9% of the Army's most advanced attack helicopter capable of providing the kind of force multiplier needed to fight the deep battle envisioned in the Airland Battle 2000 scenario. With the production line in danger of closing before the achievement of the program objective of 1,206 aircraft, the ARNG will continue to be short for many years to come.

The ARNG utility helicopter fleet will be updated only marginally in the modernization program as less than 90 UH-60 Black Hawks are currently scheduled to enter the inventory. In addition, the fleet faces an aging problem since more than 200 of the fleet's aircraft will be over 20 years old. The vast majority of ARNG utility helicopter requirements will be filled by the Vietnam era UH-1H helicopter rather than the modern Black Hawk. This means that the ARNG may be forced, under current plans, to maintain this system well into the twenty-first century and suffer the same spare parts and interoperability problems of the current UH-1M and OH-6 helicopters.

The scout helicopter situation is made difficult by the limited production of the OH-58D scout helicopters which offers interoperability with the advanced attack helicopters. While the active component is currently using the OH-58C, the ARNG is meeting its requirements using the OH-58A and OH-6 aircraft. The OH-6 aircraft is not fully supported by the Army spare parts inventory system which results in low operational readiness rates.

The modernization of CH-47A/B/C helicopters to the CH-47D has been taking place since 1980. All CH-47A/B aircraft have been lost to the modernization effort. These are being replaced by the CH-47Cs which are being displaced from the active component which is receiving the D model. Although not originally scheduled to receive the CH-47D until FY 91, the ARNG now expects to receive its first eight aircraft in FY 88.

The ARNG has 39% of its required fixed wing aircraft (C-12/U-21) on hand. The balance is filled by the substitute U-8/T-42/U-3 aircraft. This use of substitutes, again, places the ARNG in the position of having to train with aging aircraft as over 50% of its fixed-wing fleet is more than 20 years old.

TRAINING THE GUARD

Unit Training

Several programs in the ARNG are key to providing the kind of realistic training the units need and deserve today. Each of these, the Overseas Deployment Training (ODT) program, the CAPSTONE program, the training at the National Training Center (NTC), and participation in the Joint Chiefs of Staff (JCS) exercises are vital in the Guard's mandate to provide combat ready units in support of the total force.

The objectives of the Army National Guard ODT program are to: strengthen CAPSTONE associations; provide units the opportunity to conduct wartime mission planning and training in their overseas theater of operations; provide the opportunity to conduct mobilization, deployment, and reception planning and training; increase unit readiness by providing optimum participation of units/cells in OCONUS unilateral, joint and combined exercises; and provide an opportunity for personnel to learn about their assigned area of operations, unit mission and the wartime operating procedures of their CAPSTONE gaining command. During FY 87, 34,720 Guardsmen participated in the ODT program. For FY 88, 41,716 Guardsmen are scheduled for Overseas Deployment Training.

The National Training Center (NTC) is the Army's premiere collective training center. It trains the Army's battalions and brigades in the most realistic combat environment available in peacetime. Since 1983, twelve Army National Guard roundout battalions have trained at the NTC. Current schedules call for three additional rotations through FY 89 (one in FY 88 and two in FY 89). In addition to the normal rotational unit, numerous Guardsmen (approximately 2,700 in FY 87 and an estimated 3,200 in FY 89) train at the NTC in either a Key Personnel Upgrade Program (KPUP) status or as members of the Opposing Forces (OPFOR). In addition to NTC KPUP, a total of 6,708 soldiers were deployed elsewhere in the United States to participate in KPUP training during FY 87. OCONUS Deployment was 2,579 soldiers to 12 countries to participate in 14 major JCS Exercises. Without these key personnel participating in exercises, successful mission achievement would have been difficult. As the total number of ARNG soldiers trained at the NTC approaches 4,000-5,000 per year, any reduction in resources for NTC will impact heavily on MOS/SSI training on ARNG personnel.

JCS exercise participation is designed to train units in accordance with existing contingency plans. These exercises provide the opportunity to evaluate standing operating procedures and war plan development. They also provide opportunities for CAPSTONE wartime mission training and strengthen CAPSTONE relationships. During the exercises commanders and staffs train in the Air Land Battle doctrine in as realistic an environment as possible. They can exercise and evaluate personnel and administrative, logistics, and communications systems. They can also weld all elements, combat, combat support, and combat service support into an effective fighting force. Currently 30 exercises have been scheduled for FY 88.

Aviation Training

In 1978, the ARNG began developing the concept of centralized ARNG aviation training sites (AATS). The concept was based on the premise that Active Component capabilities to support training of aviation skills unique to the ARNG would be constrained in the 1980's and beyond. Experience through the mid-1980's has proven the premise of constrained capabilities to be valid. The concept has been successfully implemented with the Eastern and Western AATS located in Pennsylvania and Arizona respectively.

The Eastern AATS, which began operations in 1981, emphasizes individual aviator qualification training in utility and cargo rotary wing aircraft and selected fixed wing aircraft. During FY 87, the Eastern AATS trained 719 students while utilizing 6,101 flying hours. Of considerable importance is the UH-1H synthetic flight training system supporting Active Component, Army Reserve and Army National Guard aviators in the region which the Eastern site operates. Over 14,600 creditable aircrew flying hours were accomplished in the simulator. The Western AATS, which focuses on attack and aeroscout rotary wing operations completed training of 140 students who used 1,722 flying hours. Each site will begin operating an AH-1 "Cobra" flight weapons simulator and the student load will increase.

As resources become more constrained in 1988 and 1989, the role of the two training sites will become more important. Greater emphasis on resource intensive training will occur. Such emphasis will minimize the impact of resource reductions in flying hours, training time, and overhead that would be required if the same training were offered by aviation units in each of the several States. The ability to meet this role will be limited in the Western site without the necessary full time personnel. These training sites serve as "survival kits" for ARNG aviation and provide a pressure relief valve for the States so that unit level training missions can be accommodated in the state. Overall, ARNG aviator unit readiness will be improved.

In May 1985, the Army approved a three part fielding plan for the ARNG's AH-64 (Apache) Advanced Attack Helicopter Battalion (AAHB). Active Component activation of AAHB's utilizes a single station fielding concept consisting of approximately 90 days of tactical training conducted at Fort Hood, Texas. Prior to beginning this training, battalion personnel are 100 percent technically trained. A full complement of authorized equipment is received at the beginning of the 90-day training cycle. The Army directed that National Guard AAHB's would be filled to the same level of authorized equipment as Active Component counterparts.

In FY 87, the North Carolina ARNG completed Part I training, and unit instructor cadre returned home in October 1987. The South Carolina ARNG began technical training of pilots and maintenance personnel at the aviation schools in Fort Rucker and Fort Eustis. In FY 88, the NC ARNG instructor cadre began administering Part II home station training, and the battalion is scheduled to deploy for Part III training during July-August 1988. The SC ARNG is programmed to send its cadre to Fort Hood in July 1988 for Part I training to return in October 1988.

In FY 89, the SC ARNG is programmed to complete Part II and III training at home station and Fort Hood in the same manner as the NC ARNG FY 88 plan. The National Guard Bureau continues to closely monitor training of the two ARNG battalions and is finalizing a formal training publication based on lessons learned which will institutionalize the training program for future ARNG Apache battalions. The three-part fielding process is time sensitive and must occur as scheduled to meet the battalion training dates already coordinated with Apache Training Brigade at Fort Hood. Delays would impact not only the ARNG but active component battalion fielding as well.

NGB established Night Vision Goggle (NVG) Training training objectives for ARNG tactical aviation units on 1 October 1981. NVG qualification is now mandatory for all helicopter pilots. All pilots are now NVG qualified during undergraduate flight training at Fort Rucker, Alabama. In addition, NVG mission training in unit tactical tasks was mandated for specific positions identified by the unit commander. Mission training requires an additional 10-15 hours of NVG flight. In FY 87, the ARNG continued NVG qualification training at Army Aviation Support Facilities (AASFs) and unit schools. More than 70 percent of aviators are now qualified, with nearly 30 percent mission trained. On 17 September 1987, the ARNG modified its NVG milestones to expand the qualification criteria from 30 percent NVG mission trained and current, to 100 percent NVG mission trained and 50 percent current by 14 September 1989. By meeting those objectives, units will have fully trained crews with a sufficient number current and in continuation training to support round-the-clock operations in the event of mobilization.

In FY 88, units are expected to complete initial NVG qualification of 100 percent of aviators, and proceed with additional NVG mission training. During FY 89, all tactical aviation units are expected to reach 100 percent of aviators NVG mission trained, and have 50 percent returned to currency and in continuation training.

Current initiatives include resourcing aviation units with additional night vision devices to provide sufficient equipment to meet and sustain the ARNG night operational capability provided by the revised milestones. Consequences of denying additional resources will seriously impact the ARNG's overall operational readiness. Until the NVG milestones are achieved, units will not have night operational capability as a complete unit, but only with selected crews or company/battalion minus elements. The impact on Total Army ability to effectively sustain round-the-clock capability could be decisively impaired without complete ARNG participation.

Training Support

Limited amounts of training time, unit dispersion, and constrained maneuver space and gunnery ranges create unique training requirements for the ARNG. Many of these requirements can be met through the innovative use of training devices and simulators and a comprehensive development program for local training areas.

Several studies have been completed that describe the ARNG training problems and possible solutions. These studies recognize that the use of simulators and training devices would be the only way to train to standard considering the unique training environment in which the ARNG exists. Training must be taken to the troops and the effects of constrained ranges and training areas must be overcome. Training devices and simulators fill part of that need since devices and simulators are cost effective and time effective.

The Army's five year plan for Reserve Component (RC) devices/simulations has shrunk by 53.2% in the first two years of its existence (from $499 million to $233 million). With the exception of Regional Training Sites-Maintenance (RTS-Maint) every program has required ARNG funding to survive. The status of the major programs is cited below.

Multiple Integrated Laser Engagement System (MILES) sets for major training areas are now in place. Fielding of platoon size sets for maneuver battalions has begun and is scheduled for completion in September 1988. M-81 chemical agent alarms have been fielded and eight Mobile Conduct of Fire Trainers (M-COFT) also have been fielded. These two programs are on schedule. GUARDFIST I and II have been combined and the research and development contract has been awarded. The contract for the Precision Gunnery Trainer for DRAGON and TOW antitank missile systems has been awarded and ARNG units may receive these trainers in FY 91 or 92. If the Active Component fields these in FY 90 or 91, the ARNG will have the opportunity to accelerate acquisition of these systems. These training systems provide maneuver units the opportunity to practice gunnery in armories and on ranges without expending live missiles. This allows the use of Local Training Areas for realistic gunnery exercises.

Advances have been made in the number and quality of devices and simulators dedicated for the ARNG but many maneuver units have neither advanced training devices nor simulators. Combat Support and Combat Service Support units have been virtually ignored with few training initiatives planned for them.

Studies conducted by the Logistics Management Institute and the Industrial College of the Armed Forces coupled with the Department of the Army Management Action Plan recognize training shortfalls in Reserve Component maintenance units and recommend establishment of Regional Training Sites-Maintenance (RTS-MAINT). The RTS-MAINT provide maintenance military occupational skill transition and sustainment training during peace-time allowing the mobilization and deployment of Reserve Component maintenance companies capable of supporting current and force modernization systems. The National Guard Bureau is working with the Department of the Army and the Major Commands to develop programs of instruction, procure facilities, provide manpower, and field training devices to the RTS-MAINT.

The Army National guard has proponency for thirteen RTS-MAINT sites. An aggressive sustainment training program has been initiated at Fort Bragg, North Carolina, Camp Shelby, Mississippi, Fort Dix, New Jersey, and Camp Dodge Iowa. RTS-MAINT sites at Camp Blanding, Florida, Camp Roberts, California, and Camp Custer, Michigan, are scheduled for construction in FY 88. The remaining ARNG proponent sites are programed for Camp Ripley, Minnesota, Fort Riley, Kansas, and Gowen Field, Idaho in FY 89; Fort Stewart, Georgia, in FY 90 and Jefferson Barracks, Missouri, and Pearl City, Hawaii, in FY91.

In addition to the thirteen NGB proponent sites, FORSCOM has proponency for six additional sites. They are programed for construction to begin in FY 89. The six FORSCOM sites are Fort Hood, Texas, for FY 89; Fort McCoy, Wisconsin, Fort Indiantown Gap, Pennsylvania, and Fort Devens, Massachusetts, for FY 90, and Fort Chaffee Arkansas, in FY 91. A site programed for Aberdeen Proving Ground, Maryland, in FY 92, although considered a TRADOC proponent site, will be managed by FORSCOM. Of the FORSCOM sites, two, Fort

Indiantown Gap and Fort Devens, have already started limited sustainment training.

At present, efforts are being made to obtain major end items and components identified as required for training for each RTS-MAINT. All required major end items and system components will be added to the TDAs of each site. Nine M1 tanks have been located and are programed for delivery to all current sites. These tanks will require some maintenance prior to being used for training. Maintenance will be provided by the receiving site with a plus up in repair parts funds going to the USPFO supporting each RTS-MAINT.

The inability to train on combat items of equipment is the greatest problem hindering maintenance MOS proficiency. The urgency of finding a solution to this problem is further compounded when it is realized that the Army National Guard and Army Reserve provide over three-quarters of the total Army maintenance capability. This is a major detriment to readiness when we consider that all the new and highly technical weapons in the Army's arsenal will serve to no advantage if there is no one capable of repairing them in the future battle. RTS-MAINT concept was developed to provide fully trained, deployable maintenance personnel capable of performing their wartime missions.

The High Technology Regional Training Center (HTRTC) is a prototype regionalized training center for the training of Reserve Component (RC) and Active Component (AC) personnel using the latest in training technology. The HTRTC strategy is to improve unit readiness by providing a training environment designed around the training requirements of RC personnel. The HTRTC, activated in October 1987, includes a Regional Training Site-Maintenance (RTS-Maint), a High Technology Training Center (HTTC), a Training Technology Field Activity (TTFA) and a Range Training Support Activity (RTSA). Sustainment and transition training on force modernization equipment is provided at the HTRTC. The HTRTC provides continuous weapons systems, weapons systems simulators and other high technology training devices to enhance individual operator and unit training.

Camp Shelby, Mississippi, is programmed for the first ARNG Regional Training Site - Medical. Camp Shelby will provide training to ARNG and USAR medical units programed to receive the DEPMEDS. The Effective date (E-date) of the Shelby RTS-MED TDA is December 1, 1987. Two Army National Guard Regional Training Sites-Medical are scheduled. The RTS-MED, Camp Shelby, is programed for construction in FY 88; the second at Fort Indiantown Gap, Pennsylvania, in FY 89. The USAR sites are named differently from the ARNG sites, but are in fact the same thing. Five US Army Reserve Regional Medical Training Centers (RMTC) are Camp Parks, California, and Fort Devens, Massachusetts, FY 90, Fort Stewart, Georgia, FY 91; Fort Chaffee, Arkansas, FY 92; Fort McCoy, Wisconsin, FY 93.

The Camp Bullis, Texas, site, presently the "schoolhouse" for DEPMEDS training, will phase out of existence with the activation of the two ARNG sites. The ARNG sites at Camp Shelby and Fort Indiantown Gap will become the new "schoolhouses."

The Army National Guard Range Modernization Program is the key factor to providing the Army National Guard with modern and adequate training support facilities. Range modernization supports standardization and provides the critical elements needed to enhance weapon proficiency, qualification, and combat readiness.

The Army National Guard Range Modernization Program was initiated during the late 70's to support new weapons systems, new training doctrine, and to offer tactical training close to home. Until that time, the quality of Army National Guard Training Facilities varied from location to location, ranging from small undeveloped open fields to large nonstandard facilities. The range modernization program is built upon the development and upgrade of local training areas and is designed to maximize training time while reducing material operating costs. A significant aspect of this program is the Army National Guard Master Range Plan which drives the states Five Year Range Development Plan. This management tool incorporates all aspects of ranges and support facilities requirements. This makes it possible for National Guard Bureau to assist with standardization, tracking, and inventory/prioritization of proposed Army National Guard modernization projects.

The range modernization program has advanced through the success of the FY 87-FY 91 Program Development Package which provided over $19 million dollars in FY 88 and is projected to produce approximately $69 million in

FY 89, 90, and 91. The Army National Guard Range Modernization Program also includes funding for Remoted Targetry Systems through Other Procurement Army. The Army National Guard competes for Other Procurement Army funds based on program priorities.

Current initiatives include submission of funding packages for FY 89-FY 94 which identifies the need, by range project, for expenditures of approximately $200 million dollars on training range modernization. This initiative supports the development of ranges which provide for individual soldier marksmanship, armor and mechanized infantry, and combined arms training at locations which will make it possible to expend valuable training time efficiently in order to produce higher levels of readiness.

If this program is denied or slowed, National Guard units will be required to expend valuable training time and expense traveling to and from training sites. Training opportunities will be restricted because of range scheduling difficulties and the inability of troops to reach needed training facilities during IDT periods. National Guard Units will be left with obsolete training facilities which do not allow for training up to current ARTEP standards. Such adverse action would lower readiness levels due to lack of training opportunities in the basic combat tasks required.

READYING/MOBILIZING THE GUARD

Mobilization preparedness is a major objective of the Army National Guard. Training for and evaluation of mobilization preparedness are essential for improving unit and State Area Command (STARC) capabilities to execute mobilization and deployment responsibilities.

The ARNG mobilization exercise program during FY 87 consisted of 856 exercises. Examples of exercises conducted in support of state mobilization programs and major ODT include REFORGER, TEAM SPIRIT, ABRIENDO RUTAS, and BRIGHT STAR. In addition, States participated in the Headquarters Department of the Army exercises POWER SWEEP 87 and WINTEX CIMEX 87. These exercises showed that Guard units can successfully perform required mobilization activities within a time frame which has a potential for reducing theater arrival dates. Continued exercises will reinforce and enhance ARNG unit capability to mobilize.

The ARNG implemented an Emergency Mobilization and Deployment Readiness Exercise Program (EMDREX) during FY 87. These exercises are designed to evaluate the ability of rapidly deploying, high priority units to perform required alert and mobilization functions at home stations; prepare for deployment; and move to mobilization stations, Aerial Ports of Embarkation (APOE) or Sea Ports of Embarkation (SPOE) within a constrained timeframe. The first of these type exercises was conducted by the state of Oregon with outstanding results.

During the first quarter of FY 88 all of the STARC headquarters participated in a Joint Chiefs of Staff mobilization exercise titled PROUD SCOUT 88. This was a command post exercise (CPX) designed to evaluate the plans, policies, and procedures utilized during mobilization in a multiple theater environment. In conjunction with PROUD SCOUT, the exercise schedule for FY 88 contained a major new initiative with the First U.S.Army GOLDEN THRUST 88 mobilization exercise. This was the first exercise designed to physically test the complete spectrum of activities as units actually moved through the five phases of mobilization (preparation, alert, mobilization at home station, movement to mobilization station, and operational readiness improvement). The exercise focused specifically on issues related to the actual simultaneous mobilization of multiple units to determine flaws or discrepancies in existing plans, policies, procedures, and systems. In addition to the above mentioned exercises, the STARCs are planning to conduct approximately 900 unit level mobilization exercises during FY 88. The FY 89 mobilization exercise schedule will include ARNG units participating in Department of the Army exercises PROUD EAGLE and WINTEX CIMEX, in addition to several hundred annual mobilization exercises conducted by STARC headquarters.

Reductions from programmed funding levels, will force the ARNG to return to approximately the FY 84 execution levels or roughly 420 unit mobilization exercises. Such a reduction would have a correspondingly negative effect on adequately sustaining mobilization readiness in units for the outyears. Any reduction retards progress towards attaining the goal of placing all ARNG units in a three year mobilization exercise cycle. Achieving this goal has become more critical as inspections and exercises indicate that the deterioration of a unit's mobilization capability begins toward the later part of a three year period, signalling the need for triennial exercises.

Readiness in the Army Guard is at its highest level. In most cases, this readiness closely parallels the active component, especially in the area of combat support and combat service support units.

During FY 87, 67% of ARNG units reported an overall ready status, with 79% of ARNG units reporting ready in equipment-on-hand. This reflects a readiness improvement of 2% and 4% respectively in these measured resource areas. This increase in readiness resulted from intensive readiness management efforts and, to some degree the dedicated procurement initiatives. These figures include 257 units temporarily not ready because they are undergoing Department of the Army directed restructure or modernization actions. The most current MICAF (Measuring Improved Capability of Army Forces) report (FY 86), which measures the increased capability of our forces using 1980 as a base year for equipment-on-hand, showed a positive increase in capability of nine percent throughout the ARNG's major combat units in FY 86. The 33% cumulative increase since the 1980 base year indicates that Guard modernization efforts are in fact paying dividends.

The primary catalyst in having 80% of ARNG units report a deployable level of fill in equipment-on-hand is the ARNG's Equipment Readiness Analysis (ERA) program. The ERA program is a major element of the ARNG policy to manage and control "instant unreadiness". This program redistributes equipment against known unit requirements to improve ARNG overall readiness. Since January 1986, 349 units have been upgraded to deployable status, and this upward trend is projected to contiue as the ARNG National level ERA program is fully implemented.

Overall ARNG readiness is successfully managed by a Readiness Action Plan (REAP). Readiness issues are discussed and resolved at various levels which include: State Readiness Committees; the ARNG Readiness Council made up of two representatives per Army Area; and the ARNG Force Readiness Committee which is chaired by the Director of the Army National Guard.

The positive readiness trend experienced in FY 87 is expected to continue through FY 89 as National Guard Bureau and state readiness committees put forth a unified effort to identify readiness inhibitors, report these inhibitors on the unit status report, and strengthen ARNG readiness management polices. The ability of the ARNG to respond to the demands of improving readiness to meet warplan tasks will be degraded, however, if equipment resourcing is not continued at a level which achieves attainment of a combat ready force.

INFORMATION MANAGEMENT

Several significant events are taking place as the ARNG continues to upgrade and expand its automation efforts. At the United States Property and Fiscal Offices (USPFO) across the country, new Sperry 5000/90 minicomputers are being fielded during calendar year 1988. This equipment will replace outdated computers with current technology. This system of minicomputers will be expanded by the Reserve Component Automation System (RCAS) which will field over 22,000 microcomputers and provide automated unit administration to even the most remote armory location. The Guard's readiness and mobilization reporting capability will be greatly improved by this enhancement.

The ARNG has also expanded the use of electronic mail, data transfer, and software distribution to speed coordination and reporting response time. Through the use of commercial electronic mail networks, the ARNG has been able to reduce the cost of communications by telephone and U. S. mail. This service has been expanded to all States and Territories and over 5,000 ARNG users are currently participating in the network.

In an effort to expand the capability to provide for national emergency communications, the ARNG is working with other government agencies to provide a communications network to state Emergency Operations Centers (EOC's), State Area Commands, and armories. This system also provides a gateway to the Defense Data Network.

The ARNG has an approved Information Management Plan (IMP) which provides a comprehensive list of 146 major initiatives that are needed to fully automate the ARNG. In Fiscal Year 1988, the ARNG received funding to begin developing data bases and applications identified in the IMP. In FY 89, $15 million is budgeted to support IMP initiatives.

GUARD FACILITIES

The Army National Guard (ARNG) Plan provides command direction and guidelines for shaping the future of the Guard and establishes priorities of the Director, Army National Guard and Chief, National Guard Bureau. The facilities program has been developed within the constraints of available resources to support this Plan. Each state must give command emphasis to modernizing existing facilities where economically practical or to combining new units at existing armories as an alternative to the final option of new construction to satisfy immediate facilities needs. Priority for construction is given to new force structure and significant changes in the existing structure, new combat equipment, expansion of the training base to include modern ranges and troop support facilities, and renewal or replacement of critically obsolete armories.

Following The Army Plan (TAP) guidelines for improved quality-of-life of the soldier and improved readiness of aircraft and combat equipment maintenance facilities across the board have been given priority to correct shortfalls in work areas.

The $140 million FY 87 Military Construction program was the largest authorized with 77 major projects valued at $100 million and 75 additional projects, each costing $400,000 and under for a total value of $20 million. The five-year program for acquiring regional training centers was started with the first maintenance training centers authorized at Ft. Bragg, North Carolina; Camp Shelby, Mississippi, and Camp Dodge, Iowa. New and expanded armories required for the reactivated 29th Division were started in Virginia.Of the 77 projects authorized, 74 were executed during FY 87 including 46 armories, 11 maintenance shops, 15 training site improvements, ranges, barracks or regional training center projects and one aviation support facility and USPFO office. One authorized project was cancelled and the remaining two projects should be awarded during FY 88.

The enacted FY 88 program of $182 million includes 39 armories, 17 training site projects, 11 aviation facilities, 18 maintenance shops and 8 other support facilities including the authorization of the first phase to the National Guard Center. Congress added 16 armories and 9 other projects to the requested program, but significantly reduced funding for the Center building to partially finance these additional projects.

Current Army planning indicates significant reductions in future funding levels for all Army military construction program. The Army Plan places greater emphasis on maintaining what is currently in the system and reduces new construction to minimum essential needs. These planning guidelines contain reductions to the projected Army National Guard Military Construction funding stream, resulting in fewer possible projects for renewal or modernization of existing facilities. Project types which are to be given lower command priorities include training site barracks and supply buildings, vehicle storage buildings, armories that are functional but require expansion for accommodating assigned units and personnel, and classroom space where alternatives can satisfy the requirement on an interim basis.

The backlog of construction requirements remains at about $2.4 billion. Current trends of retrenchment on planned construction programs and new requirements driven by force structuring initiatives will adversely impact on this backlog. The reduced construction programs will add two to five years to planned programs such as securing the necessary facilities for the reactivated 29th and 35th Divisions, the new missions assigned to the 49th Division and the 27th Brigade, and organizing the new 3rd Brigade of the 42nd Division (NY-ARNG).

The extended programs and reduced annual investment for renewal will require continued use of the aging and often inadequate facilities for a longer period of time. The replacement rate for armories could again approach the 100 year cycle as it was up to fiscal year 1985. Such actions will create increased demands for both State and Federal operations and maintenance funds to continue leases and to operate inefficient facilities.

ARNG SAFETY PROGRAM

Each year the ARNG fields an all encompassing special emphasis campaign based on past accident experience. Using films, videotapes, posters and other innovative media, specific countermeasures are developed to reduce adverse accident trends. Since the first campaign in 1980, accidents have trended downward with the most notable being a reduction in Army motor vehicle accidents from 11.00 per million miles driven to 1.20 in 1987. Safe AT 87, of which the ARNG was the major player, had a net result of a 23 percent reduction in annual training accidents during 1987.

The ARNG safety effort was excellent in FY 87. Overall ground accidents were 394 less than SafeArmy 1990 objectives. Through the use of precisely targeted accident prevention efforts, personnel injury, Army motor vehicle, and Army combat vehicle were significantly reduced.

The ARNG Class A aircraft accident rate for FY 87 was 1.13 aircraft accidents per 100,000 flying hours. This rate compares quite favorably to the Army wide rate of 2.22. In fact, the ARNG Class A experience represents only 10 percent of the Army-wide statistics (4 of 38) and our Class A through C experience represents only 13 percent of the total Army experience (17 of 127).

CONCLUSION

The task ahead is not an easy one. In the face of severe budget constraints, the challenges facing the Guard will be even greater than in the past. The Army Guard has grown considerably in the last ten years. It must continue to grow to maintain the momentum that has been built up over the last decade. Since the late 1970s, the Army National Guard has increasingly become a more important player in our nation's defense. This has been accomplished because of dedication on the part of all involved. The individual soldier has been willing to train extra hours and, when required, to deploy to distant training areas to gain as much expertise as possible on the latest techniques and equipment. The leadership of the Guard has been committed to finding new and innovative ways to train, motivate and provide the best for the least cost. The Army has been fully supportive of the Guard as an equal partner and has provided the latest equipment and unparalleled training opportunities. The Congress has been willing to direct the necessary funding to carry out these crucial programs which make the ARNG a vital part of the Total Army. The partnership between the Army National Guard, the Army, and the Congress has worked well to fashion an Army Guard fully capable of serving as an equal partner - an "Army on Call" - for this nation's defense. We must continue this trend in the coming years.

ARMY RESERVE

STATEMENT OF MAJ. GEN. WILLIAM F. WARD, CHIEF, ARMY RESERVE

COMMENDATION OF SENATOR STENNIS

Senator JOHNSTON. General Ward?

General WARD. Mr. Chairman, members of the committee, on behalf of the more than 600,000 members of the United States Army Reserve, it is a pleasure to be here. I have a statement which, with your approval, I will submit for the record.

Senator JOHNSTON. Without objection.

General WARD. I would like to join my brothers in arms here, and sisters in arms, the other services, in extending our gratitude to Senator Stennis. He has been a great American and a great legislator. We salute him today and wish him well in his retirement. We hope that the years to come will be as full and rewarding to him as his years of public service have been.

CURRENT STRENGTH OF ARMY RESERVE

The Army Reserve today is an essential part of the total force, and it is the best Army Reserve our Nation has ever had. It is better trained, better led, and better managed than ever before, however, 1989 funding constraints, if extended into future years, would threaten those achievements. The Reserve Personnel, Army budget request for 1989 will buy less than the 1988 appropriation. While the buying power of the 1989 request is reduced from 1988, it, nevertheless, will pay for a substantial Army Reserve force.

We expect that the paid drill strength of the Army Reserve to increase to about 293,000 by the end of 1988, but there is no budgeted growth for 1989.

The Army's increasing reliance on the Army Reserve argues strongly for increased numbers of drilling Reservists and for more full-time support. Any new units required to fulfill these newly assigned missions cannot be brought into the force structure without changes in deactivations, inactivations or major changes in existing units.

1989 REQUEST FOR AGR

The 1989 request for AGRs is maintained at the 1988 level of 13,329. Civilian technicians will actually decline slightly to 8,032, which is slightly below the fiscal year 1987 level. While we remain committed to the need for an increased full time support, fiscal realities have required the deferral of that goal in fiscal year 1989. The Army Reserve has historically had a significantly lower percentage of total full-time support than the other Reserve components, we only have 9.3 percent, and if you consider the IRR, it comes down to a little over 4 percent to support that 615,000 people in fiscal year 1989.

We clearly recognize that full time support is probably the single most essential element in the calculus of readiness. It is a force multiplier. It is a catalyst. Full time support allows the Reservists to concentrate on training rather than administration. As this program has grown over the last 4 or 5 years, that has made a substantial difference.

The AGR's provide expertise and in-depth familiarity with the Reserve experience. They are uniquely effective in their role as key support personnel in troop program units. The relatively small number of AGR's and other full-time support personnel enables Reserve units to replace more expensive active component units. In this sense, the investment is a good one. In return, this investment allows us to be ready and to meet our mobilization mission.

END STRENGTHS

In the years when the end strength of the active Army is being reduced by about 10,000 soldiers, the lack of paid drill strength and full time support within the Army Reserve will add some element of risk to the total Army's ability to improve its readiness and expand its mobilization capability. Difficult choices will have to be made between now and the years after fiscal 1989. In the issue of force structure, our decisions must be predicated upon an objective analysis about which structure will best allow the U.S. Army Reserve to meet the requirements of our warfighting commanders-in-chief.

O&M BUDGET

The operations and maintenance budget request for 1989 is $795 million, which is a decrease of $63 million from fiscal year 1988. Achieving this reduction, while leaving minimal essential mission requirements intact, requires reductions in base operations support, unit supplies and equipment. It also necessitates major reductions in IRR screening, over 40 cardiovascular screening, and civilian personnel accounts. We expect these reductions, severe as they may be, to leave essential operations intact during fiscal 1989, notwithstanding their great impact upon the accounts I just mentioned.

Reserve components, properly staffed and equipped and trained, can do the job and accomplish the missions assigned at a fraction of the active Army cost. In the days of tight budgets, they are the best bargains in DOD. It is essential, though, that we recognize that the budgets represent barebones requirements.

Constraints, however minimal, cut through muscle, nerve and sinew, into the bone of readiness. There are basic levels of manning, training and equipment that must be met if the Reserves are to remain effective as a part of the total force.

Your help in meeting the Army Reserve's central requirements is gratefully appreciated, and will continue to be needed as we meet the challenges of today and the demands of tomorrow.

This concludes my statement. Thank you very much for the opportunity to be here.

[The prepared statement of General Ward follows:]

PREPARED STATEMENT OF MAJ. GEN. WILLIAM F. WARD

CHIEF

ARMY RESERVE

Mr. Chairman and Members of the Committee:

I am pleased to be here today representing the more than 600 thousand citizen-soldiers of the Army Reserve to present the FY 1989 Reserve Personnel, Army (RPA) and Operation and Maintenance, Army Reserve appropriation requests. I have a statement which, with your approval, I'll submit for the record.

The Army Reserve today is an essential element of the Total Army. It is the best Army Reserve our nation has ever had. It is more ready and better trained than it has ever been. It is also better led and better managed than ever before. However, funding constraints in FY 1989, if extended beyond that, threaten these achievements.

The Reserve Personnel, Army (RPA) budget request for FY 1989 will buy less than the FY 1988 appropriation. The FY 1989 request is for $2.3 billion, an increase of $21 million over the amount appropriated in FY 1988. However, including the FY 1988 pay raise, the FY 1989 request is actually a decrease of $3 million. (If the FY 1989 pay raise were taken out of the request, it would be a decrease of $71 million.) The FY 1989 request must also pay for the extension of the GI Bill and a full year's cost of the employer's share of FICA contributions on drill pay. These two items, totalling $77 million, were funded at the expense of training programs in the FY 1989 request.

While the buying power of the FY 1989 RPA request is reduced from FY 1988, it will nonetheless pay for a substantial U. S. Army Reserve Force. At the end of FY 1987, there were more than 288 thousand paid drill strength members of the Army Reserve assigned to troop program units. That number is expected to increase to over 292 thousand by the end of FY 1988. But there is no growth budgeted for in FY 1989.

Similarly, the FY 1989 request for Active Guard Reserve (AGR) is maintained at the FY 1988 level of 13,329. Civilian technicians will actually decline slightly to the FY 1987 authorized level of 8,032. While we remain committed to the need for an increase in Army Reserve full-time support, fiscal realities have required the deferral of that goal.

The Individual Ready Reserve (IRR) is the Army's principal source of trained military personnel to serve as replacements and filler personnel for both Active-

and Reserve Component units. Its strength has grown from 213 thousand in FY 1981 to a FY 1987 end strength of over 287 thousand.

The FY 1989 request also included $42 million for various incentive programs and $39 million for education benefits. These programs are a significant help in maintaining our unit strength. The incentive program pays a variable bonus to persons enlisting in the Army Reserve in specific critical skills or high priority units. The education benefit program helps build a stronger, smarter Army Reserve. These programs are complementary and both are essential to attaining our strength goals.

Although the programs above have been maintained at satisfactory levels, considering the mission, there is an offsetting decline in other training funds of $40 million or 14%. Although the loss of training opportunities is always of concern, the Army Reserve's essential training requirements will continue to be met in FY 1989.

In a year when the end strength of the Active Army is being reduced by 10,000 soldiers, lack of paid drill and full-time support strength growth within the Army Reserve will add risk to the Total Army's ability to expand its readiness and mobilization capacity. Numerous changes to the Army Reserve's force structure intended to realign it more closely with wartime requirements will have to be deferred to some uncertain date in the future or accomplished within current end strength limitations. Such "out of hide" changes raise the level of risk of personnel and structure turbulence that may degrade the Army Reserve's ability to improve its mobilization readiness. Turbulence may also result when we are required to place new structure, and relocate, in response to populatons shifts, existing units to areas of our country that can demographically support our personnel requirements. Many of the Army Reserve's modernization efforts may also have to be deferred as the issue of some new equipment items must be delayed until the full-time support personnel required to maintain them are authorized.

In the years beyond FY 1989, difficult choices will have to be made between retaining existing structure and activating programmed structure in the face of constrained funding. We will predicate our decisions upon an objective analysis that structures a USAR force that best meets the requirements of our war fighting commanders-in-chief.

The operation and maintenance support of the Army Reserve has also been reduced significantly. The Operation and Maintenance, Army Reserve (OMAR) budget request for FY 1989 is for $795 million, a decrease of $63 million from FY 1988. This is after price inflation and pay raises have been included in the FY

1989 request. Achieving this reduction requires a reduction in BASOPS support, unit supplies and equipment replenishment, as well as major reductions in the IRR and 40 and over cardiovascular screening programs. Finally, personnel could not be totally exempted from the cuts. The Army Reserve is reducing civilian technicians and Department of Army civilians by 400 and 200 respectively. We expect that these reductions, severe as they are in a small program, will leave all essential operations intact through FY 1989.

The bright spot to date has been equipment. Since FY 1981 the Army Reserve has received approximately $1.1 billion worth of equipment from both the Dedicated Procurement Program and Army procurement combined. This equipment has substantially improved the Army Reserve training and capabilities. Progress is being made; however, we were still short $2.2 billion of our wartime required equipment levels at the end of FY 1987, according to the Annual Report of the Reserve Forces Policy Board for FY 1987.

In conclusion, as you consider our budget requests for FY 1989, I would like you to bear in mind the words of Secretary Marsh and General Vuono in their recent joint posture statement for the Army:

"The assignment of appropriate missions to the RC continues to be a cost effective means of expanding Total Army readiness and mobilization capacity."

"The Total Army's growing reliance upon the RC reflects its [increasing] competence and professionalism. The RC is no longer merely a supplement to the Active Army. Today it is an essential element, rounding out key divisions of the Total Army, with some RC units deploying before those of the Active Army."

The point here is a simple one: the Reserve Components, properly staffed, equipped, and trained can do the jobs and accomplish the missions assigned to them. By virtue of their being part-time, our citizen-soldiers enable the Total Army to accept additional missions at a fraction of the Active Army's cost.

In these days of tight budgets they are the best bargains in DoD. However, it is esssential that we recognize that their budgets represent bare bones requests, so constrained that any reductions, however minimal, cut through muscle, nerve, and sinew into the very bone of readiness. There are basic levels of manning, training, and equipping that must be met if the Reserves are to remain effective partners in the Total Force. Your help is absolutely essential if we are to continue to meet the requirements of today and the challenges of tomorrow.

U.S. NAVAL RESERVE

STATEMENT OF REAR ADM. F.N. SMITH, CHIEF, UNITED STATES NAVAL RESERVE

RESERVE ACTION IN PERSIAN GULF

Senator JOHNSTON. Admiral Smith.

Admiral SMITH. Thank you, Mr. Chairman.

As we sit here this morning, halfway around the world Naval Reserve volunteers are on watch aboard ships in the Persian Gulf. The Navy needed them; they answered the call. A few months ago they were at their civilian jobs and now they are a part of the Middle East Force, serving their country, giving credibility to the total force.

They are a sampling of the fine sailors and officers we have in the Naval Reserve. Five of the six minesweepers and two of the frigates on which they serve are part of the Naval Reserve force.

When the Navy identified these ships, they were ready. They did not have to be put into overhaul or undergo extensive repair. They were well maintained in the Naval Reserve. They were ready.

The deployment of those ships and the service of the officers and sailors validates the Naval Reserve force program. It works. I ask your support for our program to continue to sustain the readiness and capability of the Naval Reserve, as discussed in my formal statement.

Thank you, Mr. Chairman.

[The prepared statement of Admiral Smith follows:]

PREPARED STATEMENT OF REAR ADM. F. N. SMITH

CHIEF

UNITED STATES NAVAL RESERVE

Mr. Chairman and members of the Committee:

Thank you for this opportunity to appear before you to report on the progress in modernizing and expanding the Naval Reserve and to present our program for Fiscal Year 1989. This is my first opportunity to appear before this committee since assuming the responsibilites of the Chief of Naval Reserve last May. I believe it is important to note that I am the first Reserve officer and also the first Surface Warfare Officer to head the Naval Reserve. Over the past nine months, I have spent nearly a quarter of my time in the field, at the air sites, in the Reserve Centers, listening to the Reservists, assessing their training and evaluating our direction and our readiness. I can report to this committee that our people are magnificent, our direction is right and our readiness is good. The one message I receive throughout is, give us the manning, the equipment and the training we need to properly discharge our responsibilities. Congress has made a substantial investment in the Naval Reserve during recent years and that investment has been put to good use. Please allow me to discuss with you where the Naval Reserve is today and where we are going.

A READY AND INTEGRATED FORCE

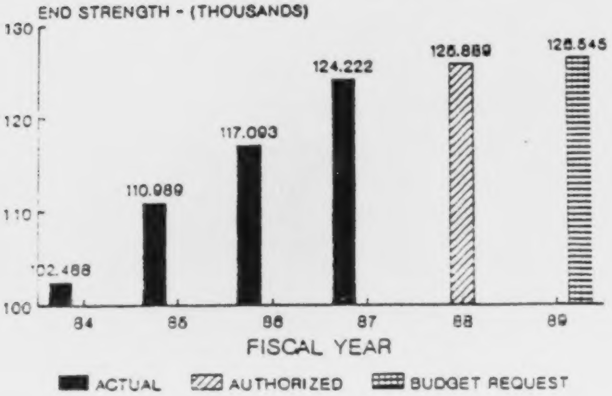
Shortly after he became Chief of Naval Operations, Admiral C. A. H. Trost said: "I look very strongly on our Reserve component as part and parcel of the active forces. They are part of our total capability. Without them, we couldn't operate." That message from CNO is confirmed by what I hear from the CINCs, the fleet commanders, program sponsors in OPNAV and gaining commands throughout the Navy; the Reserve is part of the team, the Total Force is working. One of the best examples is the continued horizontal integration of fleet compatible equipment, into the Naval Reserve. In Fiscal Year 1988 we will add four Oliver Hazard Perry class FFG-7s and one Knox class FF-1052 to the Naval Reserve Force, bringing our ASW frigate total to 24. We will also start installing the SQQ 89 ASW system on our FFG-7s; that's the same system that is being installed on new construction combatants and retrofitted on existing destroyers and frigates. By 1990 we will have 26 frigates, nearly one-fourth of the Navy's ASW frigate force. In the Naval Air Reserve, modernization through horizontal integration is also a top priority. Nowhere is it more evident than in our TACAIR community where our strike fighter squadron at Point Mugu, CA, will complete transition to the F/A-18 this spring -- the second squadron to do so. Our fighter squadrons will complete transition to the F-14 this year. The light attack squadron at Alameda, Ca will begin transitioning from the A-7E to the medium attack A-6E and KA-6D tanker this fall; a second will convert by 1990. This will bring a needed medium attack and updated tanker capability to the Reserve Air Wings. The delivery of new production P-3C update III aircraft at Jacksonville, FL is the first step in replacing our aging fleet of P-3A/B maritime patrol aircraft. With this equipment comes other needs. We need adequate numbers of properly trained Naval Reservists, Full-Time Support personnel, and the assets and facilities to provide the necessary training.

Selected Reserve Strength

Fiscal Year 1987 has shown a continued increase in drilling Selected Reserve strength. These Selected Reservists, over 124,200 at the end of the Fiscal Year 1987, are the heart of the Naval Reserve Program. They are the Navy's primary source of immediate mobilization manpower. Our drilling Reservists will grow to 125,889 by the end of FY-88 and level off in FY-89. We anticipate further growth in the future.

The requirement for Selected Reservists, and all other manpower for mobilization, is determined by the Navy's Manpower Mobilization System (NAMMOS), based on the mobilization requirements of the Fleet Commanders-in-Chief and other major commands. The budget request of 126,545 Drilling Selected Reserve strength in Fiscal Year 1989 represents 93 percent of NAMMOS requirements. In Fiscal Year 1987, the requirement for all Naval Selected Reservists, of which 21,288 were Full-Time Support (FTS) personnel, was 148,375. In Fiscal Year 1988, the authorized end strength for Naval Selected Reservists is 152,600, of which 21,991 are FTS personnel.

NAVY DRILLING SELECTED RESERVE*



*RESERVISTS IN PAID STATUS (CATEGORIES A & Q); DOES NOT INCLUDE TRAINING PIPELINE OR FULL-TIME SUPPORT (TAR & TEMAC) PERSONNEL

SUMMARY OF NAVY SELECTED RESERVE PERSONNEL (END STRENGTH)

	FY-87	FY-88	FY-89
DRILLING SELECTED RESERVISTS	124,222	125,889	126,545
TRAINING PIPELINE	2,764	4,314	3,676
NON DRILLING IMA	101	406	388
FULL-TIME SUPPORT (FTS) PERSONNEL	21,288	21,991	21,991
TOTAL	148,375	152,600	152,600

For Fiscal Year 1989 we are requesting a Selected Reserve end strength of 152,600, the same as that authorized for Fiscal Year 1988. This total includes 21,991 active duty Reservists who provide vital full-time support necessary to achieve our mission of providing a trained force, ready in all respects to mobilize. The requested Selected Reserve end strength is the minimum necessary to meet an expanded Naval Reserve role, specifically, to man additional ships and squadrons and provide additional personnel to the expanding mine countermeasures and medical support programs.

A continued no growth scenario will preclude any further expansion of Naval Reserve missions and could generate the need to reduce our capabilities in some mission areas in favor of emerging higher priority requirements.

There is no growth in our Selected Reserve end strength, and no increase in the number of Full-Time Support (FTS) personnel during Fiscal Year 1989. FTS personnel are for the most part Training and Administration of Reserve (TAR) personnel, but also include Reserve Recruiters on temporary active duty (TEMAC) and a small number of Selected Reserve Officers recalled for duty at headquarters and the seat of government in accordance with Title 10 U.S. Code, section 265. Our FTS personnel are vital to the attainment of the Naval Reserve mission; they are the manning continuity for Naval Reserve Force ships, Reserve aircraft squadrons (RESFORONS) and the entire Naval Reserve infrastructure. They provide the day to day training, maintenance and support functions associated with the modern state-of-the-art equipment in the Naval Reserve today. Our TARs perform the inescapable daily administrative and logistic functions so that we can make maximum use of our drill weekends to train and operate with our drilling Reservists. We need our Full Time Support Personnel to accomplish our mission, to provide a "ready to mobilize" Naval Reserve.

SUMMARY OF FTS PERSONNEL

	FY-87 (1)	FY-88 (2)	FY-89 (3)
TAR/265			
TAR OFFICERS	1,738	1,885	1,885
265 OFFICERS	232	233	233
TAR ENLISTED	18,087	18,396	18,396
SUBTOTAL	20,057	20,514	20,514
TEMAC RECRUITERS			
OFFICER	125	185	185
ENLISTED	1,106	1,292	1,292
SUBTOTAL	1,231	1,477	1,477
TOTAL FTS			
OFFICER	2,095	2,303	2,303
ENLISTED	19,193	19,688	19,688
TOTAL	21,288	21,991	21,991

(1) ACTUAL
(2) AUTHORIZED
(3) REQUEST

The Navy men and women we call TARs are unique in the Armed Forces. They are career military personnel whose chosen speciality is to administer and train our drilling Reservists. They are Reservists on full-time active duty and are in most cases indistinguishable from their regular component counterparts. TARs experience the same permanent change of station (PCS) moves, are on call seven days a week, are subject to the same "no notice" deployments and separations, and perform the same tasks as those who serve with the active Navy. In fact, at any given time, approximately one out of every five TAR officers is serving with a regular component activity, mostly as integral parts of the crews of active component ships and aircraft squadrons. They bring that fleet experience into the Reserve. TARs in RESFORONs receive the same training and meet the same standards as active force personnel. They operate from coast to coast, deploy aboard carriers and frigates and train overseas. TARs provide flexibility to many Reserve units by enabling them to deploy when needed even without involuntary recall of the assigned Selected Reserve personnel. TARs were aboard Naval Reserve Force ships that deployed on very short notice for duty in the Persian Gulf. Because we had the right people and adequate numbers of them, our transport squadrons were available for immediate use in Grenada and Beirut; and our Reserve Combat Search and Rescue Helicopter squadron was able to assist in the Libya air strike.

The Fiscal Year 1988 authorized and the Fiscal Year 1989 budget request for Full-Time Support personnel is barely adequate to meet existing requirements. It leaves little, if any, latitude to meet the requirements of manning ships and squadrons, expanding mine countermeasures and medical programs, continuing the TAR rating expansion and training our Reservists to satisfy increasingly more complex mobilization requirements. Without sufficient FTS personnel we must depend upon the active component to maintain the Reserve Force ships and squadrons. This exacerbates an already heavily committed active component manning situation. In addition, the paucity of FTS personnel at our Naval Reserve Centers has required drilling Reservists to provide their own support at the unaffordable expense of scarce training time. The resulting impact on mobilization readiness dictates that we provide the field with critically needed FTS personnel.

I will now discuss our drilling Reserve personnel.

Turnover rate is the best measure of personnel stability and is calculated as losses divided by the sum of beginning inventory plus gains during a fiscal year. A lower turnover rate means a stable, more ready force. I believe we have our turnover rate under control. To maintain that control we are doing a number of things. We are targeting recruiting to specific skills in specific areas. This is hard, but it puts the right person in the right billet in the right place so he or she can be trained. Good training is the key to retention. We are reducing the paperwork our Selected Reserve Personnel are now doing on their drill weekends. Reservists want good, hard, meaningful training, and do not want to waste their drill weekends shuffling paper and filling out forms. We are beginning to use Automatic Data Processing (ADP) to accomplish burdensome, yet essential, tasks. In November of 1987, the Naval Reserve Standard Training Administration and Readiness Support (RSTARS) was implemented. RSTARS will provide such administrative items as muster lists, recall bills, fitness reports and mailing lists. Additionally, RSTARS will have medical, dental classification, and urinalysis test reports. Soon we will add software to handle training packages which will include: Annual Active Duty for Training and Inactive Duty Training Travel (IDTT) training plans, fiscal year training plans, Readiness Command training plans, individual qualification reports, Reserve Center consolidated training plans, and unit training schedules. This is an exciting system and has all come about in the past year and a half as a part of SPUR, the Surface Program to Upgrade Readiness, which I will discuss later.

Building and retaining a quality manned Naval Reserve Force requires removal of as many job "dissatisfiers" as possible, and we are working on that. Of particular concern is retaining those members assigned to high priority units. Our Naval Reserve ships for example, are underway from Friday evening until Sunday afternoon on most drill weekends. Most of those young Reservists have to arrange to leave work early, get to their ship, get underway, and stand "sea detail" until they reach open water. They go on watch, conduct exercises, and equipment casualty drills and then return to port late Sunday afternoon. They have done a lot of work, have gotten very little sleep and they are tired. The next morning they are back at their civilian job. Except for the fifth paid drill on Friday evening, these Reservists receive no additional incentives for serving in that arduous around-the-clock, at sea environment. Their fellow Reservist assigned to drill at shore activities, receive the same pay and retirement credit, yet are free to spend evenings after normal working hours with friends or family. To be sure, our sea-going sailors take pride in their performance, but it is unreasonable to rely solely on pride to man our Naval Reserve ships. The Sixth Quadriennial Review of Military Compensation (QRMC) is considering incentives to address this problem.

Naval Surface Reserve

The number of ships in the Naval Reserve Force will grow to 48 at the end of Fiscal Year 1988 with further growth anticipated.

NAVAL RESERVE FORCE SHIPS

SHIPS	FY-87	FY-88	FY-89
FFG-7	12	16	16
FF-1052	7	8	8
DD-946	1	1	1
LST	2	2	2
LSD-38	0	0	0
LPD-2	0	0	0
MSO	18	17	13
MCM	0	1	5
MHC	0	0	0
ARS	3	3	3
TOTAL	43	48	48

Seven Reserve fleet hospitals have been established (two of them were established in October of 1987) with the next one planned for Fiscal Year 1990. We will commission three more Mobile Inshore Undersea Warfare (MIUW) units in Fiscal Year 1988 and another three in Fiscal Year 1989 for a total of 26 units.

Mine warfare is another area where the Surface Reserve is making major changes. At present, 82 percent of the Navy's minesweeping capability is in the Naval Reserve. In Fiscal Year 1988, we will receive the first "Avenger" class Mine Countermeasures (MCM) ship with four more programmed for Fiscal Year 1989. These new-construction ships will be assigned to the Naval Reserve after each operates as part of the active force for approximately one year. We will introduce five additional Craft of Opportunity Program (COOP) units for a total of sixteen at the end of Fiscal Year 1988.

NAVAL SURFACE RESERVE FORCE FY-89

FRIGATES	MINESWEEPERS	AMPHIBS	SUPPORT	TOTAL
25*	18	2	3	48

CONSTRUCTION BATTALIIONS	17
CARGO HANDLING BATTALIONS	13**
COOP UNITS	19
MIUW UNITS	26
SPECIAL BOAT UNITS	4
FLEET HOSPITALS	7

* INCLUDES 1 DESTROYER, DD-946
** INCLUDES 1 ACTIVE (TAR) TRAINING BATTALION

The majority of the Surface Reserve Force is comprised of over 3,000 reinforcing and sustaining units manned by more than 81,000 Selected Reservists. These units provide augment personnel for active Navy ships, combat and combat support organizations such as Amphibious Forces, afloat staffs, Special Warfare Forces, Naval Control of Shipping, Advanced Bases and the Naval Oceanographic Command. The majority of these personnel drill at our Readiness and Reserve Centers and their gaining commands.

Naval Air Reserve

Modernization through horizontal intergration continues in the Naval Air Reserve. I mentioned earlier that our strike fighter squadron at Point Mugu, CA, will complete its transition to the F/A-18 this spring, and our fighter squadrons will complete their transition to the F-14 this year. As part of our fighter transition, we received four new production F-14s this past year. The Congressional addition of A-6E aircraft in the Fiscal Year 1986 budget opened the door for establishment of a medium attack capability in our Reserve carrier air wings. Our attack squadron at Alameda, CA, will begin transitioning from the light attack A-7E to the medium attack A-6E in September of 1988; a second squadron will convert by 1990. These squadrons will also receive KA-6D tanker aircraft which will allow us to disestablish our two existing tanker squadrons of KA-3B aircraft, which face service life expiration. With the transition of our electronic warfare squadrons from EA-6A to EA-6B programmed to begin in Fiscal Year 1989, we will have both our carrier air wings modernized and of the same tactical composition as the active force.

Our Maritime Patrol Air capability was enhanced markedly in December of 1987, with the introduction of new production P-3C Update IIIs into our patrol squadron in Jacksonville, FL. New P-3C Update IIIs, purchased with the funds appropriated in Fiscal Year 1988 in the National Guard and Reserve Equipment account, will enable us to start the transition of a West Coast squadron. Additionally, five of the thirteen squadrons are now equipped with the AQA-7 triple-vernier acoustic sensing equipment and the remaining eight are slated for that equipment in Fiscal Year 1989.

The Naval Reserve presently operates 27 C-9B/DC-9 and 2 C-131H aircraft. Four of these C-9 aircraft are not cargo capable. The two C-131H aircraft are much older and difficult to maintain. The Center for Naval Analyses' DON Organic Airlift Study, 1986 shows a 60% shortfall in the Navy inventory for heavy to medium lift aircraft to support the Navy intra-theatre airlift during wartime. We will address acquisition of additional aircraft to perform these missions during the formulation of future budgets.

We continue to make excellent progress in modernizing our helicopter community. We will consolidate our two Naval Reserve Light Attack Helicopter (HAL) squadrons and the Navy's only Combat Search and Rescue (CSAR) squadron to form two Helicopter Combat Support Special (HCS) squadrons, one on each coast. The first of these two squadrons will stand up in October of 1988 and the second in Fiscal Year 1990. These dual mission squadrons provide the Navy's primary capability for Combat Search and Rescue and special warfare support. They will fly a new aircraft specifically designed for these missions, the HH-60H, which was procured exclusively for the Naval Reserve. Plans call for the delivery of the first of these aircraft in Fiscal Year 1989 and with the funds appropriated by Congress in Fiscal Year 1988, we plan to complete the buyout and have all 18 onboard by the end of 1991.

In Fiscal Year 1987, the Naval Reserve gained a new mission area with the commissioning of the first of two Reserve Airborne Mine Countermeasures (AMCM) helicopter squadrons which fly the RH-53D. The second squadron will be commissioned in Fiscal Year 1989. To enhance their responsiveness to fleet requirements, these squadrons will be located on opposite coasts. To further increase their effectiveness, we are looking at a Mobile Support Van for these squadrons which will increase their mobility, supportability, and sustainability.

NAVAL AIR RESERVE FORCE MODERNIZATION

AIRCRAFT	PHOTO FIGHTER ATTACK	TANKER	ELECTRONIC WARFARE	ADVERSARY	PATROL	TRANSPORT	HELO
FY-89	24 F/A-18s	6 KA-3Bs	4 EA-6As	2 A-4Fs	26 P-3As	2 C-131Hs	24 SH-2Fs
	48 F-14s		7 E-2Cs	6 A-4Es	81 P-3Bs	4 T-39Gs	5 HH-3As
			4 EA-6Bs	4 TA-4Js	10 P-3Cs	17 C-9Bs	12 SH-3Ds
	36 A-7Es	4 KA-6Ds				10 DC-9s	11 HH-1Ks
	6 F-4s					8 UC-12Bs	10 RH-53Ds
	10 A-6Es					2 C-20s	5 HH-60Hs

An excellent indication of the readiness and capability of the Naval Reserve is the completion of an accident free year in 1987 by the Naval Air Reserve Force. This is the first time in Naval Aviation history that a major force has been able to achieve a record of this distinction. It is a record which highlights the professionalism of the men and women who make up the Naval Air Reserve Force; and for which it has been nominated for the CNO Aviation Safety Award.

MOBILIZATION READINESS IMPROVEMENTS

Today's Naval Reserve readiness is measured against a more stringent set of criteria than has ever been applied. Gaining commands in consonance with their resource sponsors are defining Reserve mission expectations and mobilization billet requirements. While the acquisition of modern hardware is a major part of improved readiness of the Reserve, along with modern equipment must come better training. Training is vital - both to utilization of new equipment and to recruit and retain quality personnel throughout the force. Personnel assigned to non-hardware units, both air and surface, comprise approximately 77 percent of the Naval Reserve.

The toughest challenge is in training Reservists in non-hardware units -- those units which normally train each month at Reserve centers. We estimate that over 50 percent of Selected Reserve turnover is caused by our inability to provide meaningful training to our Reservists. The need for better training was reconfirmed in the DOD 1986 Reserve Components Surveys.

The Surface Reserve Training Program, a part of SPUR, (Surface Program to Upgrade Readiness) which was briefed at hearings last year by VADM Kempf, is responding to the training needs of the Surface Reserve. The sixteen Naval Reserve Readiness Command staffs are being internally restructured to emphasize readiness improvement of supported units. This will more effectively use our scarce Full Time Support personnel at the field training sites where they are needed. A network of "Readiness Centers" - enhanced training sites - will provide training in specific disciplines for Reservists who drill at smaller Reserve Centers in the surrounding area. Readiness Centers will provide concentrated training to more effectively meet the training and readiness needs of supported units. These Readiness Centers will be staffed and equipped to conduct high quality mobilization and skill related training utilizing damage control trainers, shipboard simulators, new training technologie including computer aided training, and Navy Enlisted Classification (NEC) Qualifying courses to mention but a few.

Surface training initatives are already starting to work. For example: (1) In the past year and a half, we have gone from virtually no ADP equipment in the field to a viable, working program which is eliciting rave reviews from its users. For instance, an Automated Billet Qualification Tracking System (ABQTS), which monitors Reservists from entry level skills to achieving all billet qualifications, is being implemented; (2) We are beginning to use "exportable training" which is a program to bring (export) fleet instructors to Reserve Centers to conduct training. For training which can be conducted in a Reserve Center, it is less expensive to bring in one instructor than to transport an entire unit on IDTT; (3) many of the lengthy formal schools needed by Reservists to complete their Reserve Billet Training Plan requirements, are being divided into components, or modules, which Reservists can complete during a series of IDTTs and ACDUTRA; (4) Civilian Augmented Training (CAT) - Some Reservists will attend vocational technical classes taught by civilian instructors contracted by the Naval Reserve; and (5) Shop Qualification Improvement Program (SQIP) - SQIP is an onboard training program for Intermediate Maintenance Activities that accelerates achievement of journeyman skill level and professionalism in all aspects of repair from the planning stages through post repair checkout and testing.

Our first fully functional Readiness Centers, at Houston and New Orleans are on line. Great Lakes and San Diego will follow in a few months. The remaining Readiness Centers will be incrementally phased in to allow for orderly changes in manning and the addition of automatic data processing.

Including the Naval Reserve in the Navy Training Plan (NTP) process has been another big step toward achieving improved readiness. Training requirements for Reserve units are established by the Navy Resource Sponsor. The NTP process identifies all resources required to carry out the required training, achieve readiness, and provide the basis for funding. Reserve Navy Training Plans are under development for all areas (geographic areas which correspond to Readiness Centers) and programs (which are associated with distinct Reserve programs, e.g., Naval Control of Shipping, Fleet Hospitals, Amphibious CB'S, ETC.).

The cornerstone of our training initiative is the IDTT program which links Naval Reserve units to their active duty gaining commands. IDTT gets the Reservist to his gaining command or mobilization training site for training on the drill weekend. We get more and better training and improved readiness and both the Reservists and gaining command love it.

When the Naval Reserve Force minesweepers and FFG-7 class ships were deployed in Fiscal Year 1988 to the Persian Gulf, we had to find ways to train the Selected Reserve crewmembers who were left behind. The Selected Reserve crews from five deployed MSOs and two deployed FFGs now drill on alternate ships of the same class in the same homeports. Reservists operate fully integrated with the fleet to meet today's mission. They sail in harm's way. In December, the Reserve frigate USS JOHN A. MOORE deployed to the Persian Gulf. 22 sailors who deployed with the ship were volunteer Reservists. Selected Reserve personnel also volunteered for duty and are currently serving onboard our minesweepers ordered to the Gulf. Other Reservists have worked 18-hour days using their special planning and control of shipping skills to keep tanker convoys moving on schedule in close coordination with their U.S. Navy escorts. These examples of current operations exemplify the successes of a highly motivated and capable Total Force concept.

In the Naval Air Reserve, Squadron Augment Units assigned to Fleet Readiness Squadrons are training in fleet aircraft. Two Master Augment Units have been training maritime patrol crews using P-3 aircraft temporarily assigned to the Naval Air Reserve from fleet inventories. For all Naval Air Reserve personnel we are using Reserve Training Tracks which is an automated system that defines and monitors specific mobilization training status.

NAVAL RESERVE FUNDING REQUEST

The Naval Reserve is provided essential personnel and operational support by two appropriations: Reserve Personnel, Navy (RPN) and Operation and Maintenance, Navy Reserve (O&MNR).

The President's Budget also requests $145.6 million in Fiscal Year 1989 in the Aircraft Procurement, Navy (APN); Weapons Procurement, Navy (WPN); and the Other Procurement, Navy (OPN) appropriations in direct support of the Naval Reserve. Further, the Fiscal Year 1989 Military Construction Naval Reserve (MCNR) appropriation request of $48.4 million will provide much needed design and facilities construction for the Naval Reserve and Marine Corps Reserve.

I would like to discuss the RPN and O&MNR appropriations in more detail.

Reserve Personnel, Navy (RPN)

The RPN appropriation is divided into two budget activities. Budget Activity One provides funding for Unit and Individual Training. Budget Activity Two funds Other Training and Support including active duty TAR personnel, the

Naval Reserve Officer Training Corps, Armed Forces Health Professions Scholarship Program, and the Navy Junior Reserve Officer Training Corps. Our Fiscal Year 1989 RPN budget request is for $1,621.4 million which includes $728.5 million for Budget Activity One and $892.9 million for Budget Activity Two. This represents a total increase of $108.4 million over Fiscal year 1988, and is primarily the result of pay raise annualization, Social Security rate escalation, the Individual Ready Reserve (IRR) recall, the full year cost of employer's contribution for FICA tax on Inactive Duty Training pay, and other training support costs.

The Fiscal Year 1989 Budget Request continues funding for a one day recall of members of the IRR. The Fiscal Year 1987 IRR recall validates its importance to evaluate the availability and readiness of this major source of trained personnel. The Reserve incentive program which includes selective implementation of prior and non-prior service enlistment, reenlistment, Reserve affiliation and IRR bonuses.

The budget submission also requests funding for Reserve incentive programs which include medical recruiting incentive payments to enhance Reserve recruiting of physicians and nurses with critical wartime medical skills. This includes stipend and education loan repayment programs which were first authorized in Fiscal Year 1986.

Operation and Maintenance, Navy Reserve (O&MNR)

The Naval Reserve is dependent upon funds in the O&MNR appropriation for support of Mission Forces, Depot Maintenance, and Other Support. Support for Mission Forces includes funds for fuel, intermediate maintenance, repair parts and related support for the operation of aircraft in both the Naval Reserve and Marine Corps Reserve. It also includes operating, maintenance and support funds for Naval Reserve Force ships, as well as funds for Reserve Construction Battalions, Cargo Handling Battalions, Mobile Inshore Undersea Warfare (MIUW) units and Special Combat Support Forces. Depot Maintenance includes funds for the rework of airframes and engines, the installation of aircraft modifications and Contractor Engineering Technical Services support. The Other Support category provides funding to operate and maintain Reserve Air Stations, Reserve Centers, and other Reserve facilities supporting Naval Reserve forces and for various command and administrative activities, including training, recruiting and advertising.

The funding requested for the O&MNR appropriation for Fiscal Year 1989 is $979.2 million, which is a $49.3 million net increase over the Fiscal Year 1988 funding level of $929.9. Mission Forces (Budget Activity 1) increases $44.2 million, Depot Maintenance (Budget Activity 2) decreases $2.5 million, and Other Support (Budget Activity 3) increases $7.6 million.

The increased O&MNR funding levels in Fiscal Year 1989 are earmarked as follows for new mission and growth areas: (1) Increased aircraft operating and maintenance costs in support of the A-6E, KA-6D, RH-53D and HH-60H aircraft; (2) Funding of the Reserve flying hour program at 87 percent of the Primary Mission Readiness (PMR) level, which places the tactical Naval Air Reserve Forces on the same percentage basis (although fewer hours) as the active forces;
(3) Additional maintenance and modernization costs resulting from the installation of two AN/SQQ-89 sonar systems aboard Reserve FFG-7 class ships;
(4) Expansion of the mine countermeasures Craft of Opportunity (COOP) Program; and (5) Increased training, equipment, and base operating support requirements associated with growing Selected Reserve strength levels as the Naval Reserve builds toward the Navy Manpower Mobilization System (NAMMOS) goals.

Programmatic decreases primarily reflect: (1) Reduction in the flight hour program for Squadron Augmentation Unit fleet requirements; and (2) Fewer airframe and engine reworks and modification installations.

SUMMARY

In his first address to Congress as President, George Washington said, "To be prepared for war is one of the most effectual means of preserving the peace." The Naval Reserve of today is instrumental in achieving and maintaining those means.

I will summarize my statement with the following points:

- The emphasis of our budget request is on achieving fleet mobilization requirements ... to be ready now to do what we must be able to do on "M-Day."
- Our highest priorities are to provide the Full Time Support personnel, training programs and organizational structure needed to increase our

Reservists readiness by providing meaningful mobilization training.

- The ability of the Naval Reserve to respond is evident in our day-to-day involvement in the Navy mission around the globe. This is amply demonstrated by our voluntary involvement in the ongoing Persian Gulf operations.
- Readiness through safety and professionalism is demonstrated by the achievement of an accident free year in calendar year 1987 by the Naval Air Reserve Force.
- We are more ready today than we have ever been to perform our role in the national defense. With your continued support, we will further our improvements in readiness.

I will be happy to respond to any questions or provide any additional information you may require.

REAR ADMIRAL FRANCIS NEALE SMITH, U.S. NAVAL RESERVE
CHIEF OF NAVAL RESERVE

Rear Admiral Francis Neale Smith is a native of Baltimore, Maryland, where he graduated from Loyola College in 1952. He received his commission from Officer Candidate School and was Engineering Officer aboard the Destroyer-Minesweeper USS GHERARDI (DMS-30) in the Atlantic and Mediterranean. As a drilling Reservist, Rear Admiral Smith served in Maryland and Indiana, and commanded Reserve Units in Ohio, Pennsylvania and Delaware. After his promotion to Rear Admiral, he was assigned the mobilization billet as Deputy/Vice Commander Service Group TWO, U.S. Atlantic Fleet. He also served as Commander, Naval Reserve Readiness Command, Region TEN, New Orleans, Louisiana.

Rear Admiral Smith was recalled to active duty in November 1984, as Deputy Director of Naval Reserve in Washington, D.C. At the time of recall, he was with EXXON in Houston, Texas. On 29 May 1987, he was named Commander, Naval Reserve Force and Chief of Naval Reserve, with additional duty as Director of Naval Reserve in the Office of Chief of Naval Operations. He is the first Reserve Officer and the first Surface Warfare Officer to head the Naval Reserve Force which now numbers more than 149,000.

Admiral Smith's wife, Ginny, is a native of San Francisco, California, and a former Navy Nurse. They have two sons who are in the Navy; one is a petty officer first class, the other, a lieutenant and graduate of the U.S. Naval Academy. Their older daughter is a graduate of Texas A&M and the younger daughter attends George Mason University in Virginia.

U.S. MARINE CORPS RESERVE AFFAIRS

STATEMENT OF MAJ. GEN. J.W. MOORE, UNITED STATES MARINE CORPS, DEPUTY CHIEF OF STAFF FOR RESERVE AFFAIRS

FULL-TIME AND END STRENGTH SUPPORT

Senator JOHNSTON. General Moore.

General MOORE. Good morning, sir. I also want to thank this committee for the support that you have provided for the Marine Corps Reserve. As a result of your support, we have enhanced our war-fighting capability, and today we serve as a full partner in the total force of the Marine Corps as this country's force in readiness.

However, if we are going to continue that, we need your continued support for our full time support program and our Selected Marine Corps Reserve end strength so we can be a full player in the total force.

MODERNIZATION

One other thing we definitely need is to continue modernization efforts. Modernization of aircraft such as the AV–88 and AH–1W. Modernization in other areas that we can have the same equipment, train at the same schoolhouses; and deploy and employ immediately with the same logistics trail pipeline as our regulars.

Through your support, we will continue to be a full contributor in this nation's force in readiness.

I also have a statement that I would ask the Committee to include as a matter of record. Thank you.

[The prepared statement of General Moore follows:]

PREPARED STATEMENT OF MAJ. GEN. J. W. MOORE

DEPUTY CHIEF OF STAFF FOR RESERVE AFFAIRS

Mr. Chairman, distinguished members of the Committee, it is a privilege to report to you on the current posture and future programs of the Marine Corps Reserve.

I am pleased to report the Marine Corps Reserve has continued to improve its combat readiness and warfighting capability. Its military capability is higher now than it has ever been. Your support for our manpower, equipment, facilities and maintenance requirements has made these gains possible.

Examples of this improved posture include:

- Participation by over 23,000 reservists in major exercises within the continental United States and abroad (Germany, Norway, Egypt, Korea, Philippines and Thailand).
- Achievement of 100 percent of our nonprior service recruiting goals with 98 percent high school graduates.
- Substantial equipment modernization in air and ground elements of the Selected Marine Corps Reserve.
- Achievement of 84 percent show rate during the Fiscal Year 1987 involuntary recall of the Individual Ready Reserve.

The framework for our future continues to be based on three fundamental strategies:

(1) Recruit, train, and retain quality personnel.

(2) Maintain the modernization effort to provide quality equipment.

(3) Improve Active and Reserve integration of personnel and equipment.

With the continued support of Congress and the Administration, this trend will continue, and the full potential of the U.S. Marine Corps Reserve's capability to contribute to the national defense as part of the Total Force will be realized.

RESERVE ROLES

The mission of the Marine Corps as this Nation's force-in-readiness for power projection determines our structure and Active/Reserve component mix. Charged with maintaining the assets to mobilize rapidly, the Marine Corps Reserve augments and reinforces the three active Marine Expeditionary Forces, bringing them to their full strength for contingencies. The Reserve also provides the option of expanding the Corps by fielding an additional division, aircraft wing, and force service support group.

U.S. Marine Corps Reserve roles on mobilization are:

- Augment the Active Force to field three active Marine Expeditionary Forces at full wartime strength.

- Reinforce the active Marine Expeditionary Forces with Selected Marine Corps Reserve units to provide additional desired capabilities.

- Provide the capability to field a Marine Expeditionary Brigade with reduced aviation and limited combat service support capabilities.

- If augmentation, reinforcement, and/or providing a Marine Expeditionary Brigade is ordered, the Reserve will provide a nucleus for reconstituting a division, aircraft wing, and force service support group.

- If augmentation, reinforcement, and/or providing a Marine Expeditionary Brigade is not ordered, the Reserve can provide a division, aircraft wing, and force service support group.

Our program for the future does not anticipate any changes to the aforementioned roles. The force structure is organized to support the needs of the Active Force. Capabilities absent or insufficient in the Active Force will be incorporated in the Reserve component in the mid-range period to provide a balanced Marine Total Force capability.

To execute the employment roles, timely and effective training, fully integrated with the Active Force is essential. Training and interoperability mandate the same generation equipment used by the Active Force be available to the Reserve. Congressional support of budgetary proposals will permit us to accomplish this objective and realize the fullest potential of the Marine Corps Reserve.

The Active component of the Marine Corps provides the national defense effort an extremely capable and flexible resource based on three active Marine Expeditionary Forces. This capability is enhanced by the ability of the Navy-Marine Corps team to forward deploy Marine Air-Ground Task Forces. Requirements for Active Force manpower are driven, in part, by peacetime commitments as well as the anticipation of contingency response. The Reserve complements the Active component, and, considered as a Total Force, 25 percent of the Marine Corps' force structure and 33 percent of the trained manpower available to the Marine Corps are in the Reserve. The following chart depicts the major contributions made by the Reserve to the Total Force:

CHART #1

MARINE CORPS RESERVE CONTRIBUTIONS TO THE TOTAL MARINE CORPS

Unit Types 1	Percent of Total Marine Corps
Civil Affairs Groups	100
Salvage Platoons	100
Force Reconnaissance Units	50
Air/Naval Gunfire Liaison Companies (ANGLICO)	50
Force Service Support Group Military Police	40
Tank Battalions	40
Beach and Port Companies	40
Heavy Artillery Batteries	33
Division Reconnaissance Battalions	25
Light Anti-Aircraft Missile Battalions (LAAM)	25
Infantry Battalions	25
Marine Air Control Groups (MACG)	25
Marine Wing Support Groups (MWSG)	25
Bulk Fuel Companies	25
Force Service Support Groups (FSSG)	25
Forward Area Air Defense Batteries (FAAD)	25
Aircraft Types 2	
Observation Aircraft (VMO)	33
Aerial Refueling Aircraft (VMGR)	29
Light Attack Aircraft (VMA)	28
Fighter Aircraft (VMF)	20
Electronic Warfare Aircraft (VMAQ)	18
Helicopters (HML,HMA, HMM, HMH)	18

NOTES:
1. Percentages determined by counting like type units.
2. Percentages determined by counting primary authorized aircraft.

Data as of January 30, 1988.

The Individual Ready Reserve provides a pool of Pre-Trained Individual Manpower which will be rapidly assimilated into the Active Force to meet our wartime requirements. Information on the composition and strength of the IRR will be addressed later.

FORCE STRUCTURE

SELECTED MARINE CORPS RESERVE

The structure of the Selected Marine Corps Reserve is the result of a deliberate planning process. As previously mentioned, the Selected Marine Corps Reserve is capable of providing trained units to the Active Force to increase warfighting capability. Similarity of Reserve and Active Force structure greatly enhances and streamlines the process of integrating Reserve component units with the Active Force upon mobilization. Overall combat readiness is enhanced and training costs are minimized by retaining similarity of structure.

Significant improvements in the quality of manpower have increased the readiness of the Selected Marine Corps Reserve. During Fiscal Year 1987 we continued to attract high quality nonprior and prior service personnel. In 1987, we again achieved 100 percent of our nonprior service recruiting goals with 98.2 percent of these young men and women possessing a high school diploma. Our match of unit requirements with qualified military occupational specialty trained individuals, has also substantially improved over the past year as reflected in a 3 percent gain over Fiscal Year 1986.

We were successful in recruiting prior service Marines as well, with 100 percent of our recruiting goal fulfilled. Recruiting efforts for our prior service reservists are designed to match military skills and experience to billet requirements or require military occupational specialty retraining as necessary. The result of this initiative is improved readiness while minimizing training costs.

Retention of Marines in our Reserve units has improved substantially with a 3 percent increase over Fiscal Year 1986. We attribute this positive trend indicator to the Montgomery G.I. Bill, congressionally approved incentives and increased command emphasis on retaining quality Marines.

The Fiscal Year 1987 Selected Marine Corps Reserve end strength was 42,253, an increase of 671 over Fiscal Year 1986. The Fiscal Year 1988 plan calls for a goal of 43,600. The Fiscal Year 1989 manpower plan remains at the Fiscal Year 1988 level, a number 200 less than would support force structure requirements dictated by increased reliance on the Reserve.

GROUND STRUCTURE

The Marine Corps Total Force planning process has resulted in structural changes within the 4th Marine Division and 4th Force Service Support Group. The introduction of the M198 155mm towed howitzers began during Fiscal Year 1985 and will be completed during Fiscal Year 1989. Reorganization of the artillery regiment to accommodate the M198 and provide optimum support for infantry units began in Fiscal Year 1986 and will be completed during Fiscal Year 1989. Further, our infantry capability has been enhanced by the introduction of the MK19 40mm machine gun, the shoulder-launched, multi-purpose assualt weapon, and the squad automatic weapon. These will be substantially fielded by the end of Fiscal Year 1989. The ability of the 4th Marine Division to engage and destroy mortar and artillery assets of an opponent has improved appreciably with the activation of a Target Acquisition Battery on October 22, 1987.

During Fiscal Year 1987 the Medical Logistics Company of the 4th Supply Battalion, the remainder of the 4th Medical Battalion, and the 4th Dental Battalion were activated. These activations are critical additions to the 4th Force Service Support Group and have eliminated a serious deficiency in the Selected Marine Corps Reserve combat service support structure.

Activation of a light armored vehicle battalion began in Fiscal Year 1987 and will be completed in Fiscal Year 1988. The battalion, consisting of 636 Marines and 110 vehicles, will be located in four states (California, Maryland, Utah, and Virginia). The light armored vehicle battalion represents a sizable increase in the firepower and maneuverability of the Reserve. Four tube-launched, optically-tracked, wire-guided missile platoons are scheduled for activation during the period Fiscal Year 1988 to 1991. These will measurably increase the anti-armor capability of the 4th Marine Division.

AVIATION STRUCTURE

The 4th Marine Aircraft Wing will also undergo major structural changes as we move into the 1990's. The addition of one AH-1J attack helicopter squadron and the expansion to two KC-

130 refueler squadrons are two major changes which will increase Reserve combat capabilities. The second AH-1J and KC-130 squadrons will be activated in Fiscal Year 1988 at Camp Pendleton, CA, and Stewart International Airport, Newburgh, NY, respectively.

The standup of a KFIR adversary squadron at Marine Corps Air Station, Yuma, AZ, in Fiscal Year 1986 has greatly enhanced the training and readiness of the Total Force. Operating thirteen F-21A KFIR fighters, on lease from Israel, the squadron is manned by both Active component Marines and reservists, and lends an unparalleled realism to training utilizing tactics employed by potential adversaries. The aircraft have been delivered, and the squadron has been conducting training for Active and other Reserve squadrons since September 1987.

FULL-TIME SUPPORT

Full-time manning support of the Marine Corps Reserve is provided by 5,350 officers and enlisted personnel from the Active component, 352 civil service personnel, and 1,742 reservists serving on active duty in the Full-Time Support Program. Since the Marine Corps does not use the Military Technician Program, and Active component end strength is a finite number, the Marine Corps Reserve could not meet the demands expected in the future without support provided by the Full-Time Support Program.

The Full-Time Support Program is a critical component of the manpower picture for the Selected Marine Corps Reserve. This program contributes to mobilization readiness and the accomplishment of the Reserve mission by using highly qualified Marine reservists on active duty for periods of 1 to 5 years to support the Marine Corps Reserve. Their knowledge of Reserve programs assists substantially in effective administration and execution of Reserve programs.

Full-Time Support Marines, referred to as Active Guard/Reserve in some other Services, assist in the areas of preparing and administering policies and regulations affecting the Reserve component and organizing, recruiting, instructing, training, and administering the Marine Corps Reserve in accordance with 10 U.S.C. 265, 672(d) and 678 to promote improved management and a better combat capability in the Marine Corps Reserve.

Our Fiscal Year 1987 Full-Time Support end strength was on target with a final count of 1742, three short of the approved number. Our Fiscal Year 1988 approved strength is 1945, slightly less than we had requested. Our Fiscal Year 1989 program was leveled to the Fiscal Year 1988 approved strength.

SELECTED AUGMENTATION UNITS

Recently established, the Selected Augmentation Unit Program, which began in Naval Aviation squadrons, complements the established augmentation/reinforcement role of the Marine Corps Reserve. The Selected Augmentation Unit Program is designed to identify and match portions of residual Reserve units with units in the Active component that are below strength. The remaining residual units could form the nucleus for reconstituting the Reserve division, wing, and force service support group. The Selected Augmentation Unit Program reservists will conduct their annual training duty with the active unit with which they would mobilize.

During the summer of 1987 Reserve combat service support units augmented undermanned counterparts of the 1st, 2d and 3d

Force Service Support Groups and Brigade Service Support Group-1 at Camp Lejeune, NC, Camp Pendleton, CA, Hawaii and Okinawa. Field reports were favorable, with 57 officers and 1474 enlisted Marines receiving valuable training, experience, and additional qualifications. The Selected Augmentation Unit Program enhances both combat readiness and Active/Reserve component integration. It is another credible source of support for the Active component which simultaneously provides realistic training for our Reserve. Selected Augmentation Units exemplify the confidence placed in the Marine Corps Reserve and our commitment to the Total Force policy.

INDIVIDUAL MOBILIZATION AUGMENTEES

In addition to Reservists training in Selected Reserve combat units, other drilling reservists are actively training with their active duty counterparts. Individual Mobilization Augmentees are placed on staffs within the supporting establishment and provide assistance to the staffs to which they are assigned. They have become key personnel within their organizations, as evidenced by their manning of the Marine Corps Command Center during the Grenada operation. Individual Mobilization Augmentees also man 52 mobilization stations across the country. Mobilization stations are critical to the process of assimilating members of the Individual Ready Reserve into wartime structure during mobilization.

INDIVIDUAL READY RESERVE

The strength of the Individual Ready Reserve has varied greatly over the past 10 years. However, in 1990, the effect of the initial military service obligation increase from 6 to 8 years will show up for the first time. It is projected the Individual Ready Reserve which stood at 44,580 at the end of Fiscal Year 1987 will grow to 52,000 by Fiscal Year 1990, and will exceed 80,000 by Fiscal Year 1992. At that time we predict it will level off.

The Individual Ready Reserve is the primary source of pretrained individuals for Active and Reserve component units in the event of mobilization. Management and training of personnel resources are a concern of current and future planning efforts, and we have active programs to provide appropriate training to the Individual Ready Reservists. A mobilization assignment system and a preassignment program are in place and continually refined during the conduct of regularly scheduled mobilization exercises. These programs will promote rapid assimilation of this asset. The Individual Ready Reserve provides an invaluable pretrained manpower pool at minimum cost.

In Fiscal Year 1987 we conducted the first mandatory Individual Ready Reserve call-up exercise. Individual Ready Reservists were ordered to a day of active duty at one of 52 Marine Corps Mobilization Stations throughout the United States. Of those ordered to report, 84 percent reported for duty. This exercise was not only successful, but assisted us in assessing the mobilization potential of our Individual Ready Reserve.

MODERNIZATION

Aircraft modernization plans put aircraft released from the Active Force immediately into the Marine Corps Reserve inventory. This does not, however, satisfy long-term requirements. While these aircraft remain capable, our aviation plans require continued Congressional support to field modern aircraft for our Reserve.

Aircraft such as the F-4S, A-4M, CH-46E, UH-1N, AH-1J, and KC-130F are being flown by both Active and Reserve components, providing commonality. This allows the integration of Reserve component squadrons into Active component aircraft groups in their mobilization role. The Reserve has converted to an all F-4S fighter force, and plans call for an all A-4M attack force by Fiscal Year 1989. Our goal is to start to equip the Reserve fighter squadrons with the F/A-18 beginning in 1989.

Increased requirements for rapid response and integration with the Active Force underscore the need for commonality with the Active Force units. In the aviation arena, commonality should also result in increased efficiencies in training costs, spare parts, and aircraft maintenance.

We will continue to operate the CH-53 as our heavy lift asset and plan to complete the conversion from the CH-53A to CH-53D by Fiscal Year 1991. CH-46E squadrons will continue to provide medium-lift capabilities for the Reserve until Fiscal Year 1996/1997 when they will transition to the MV-22A, Osprey.

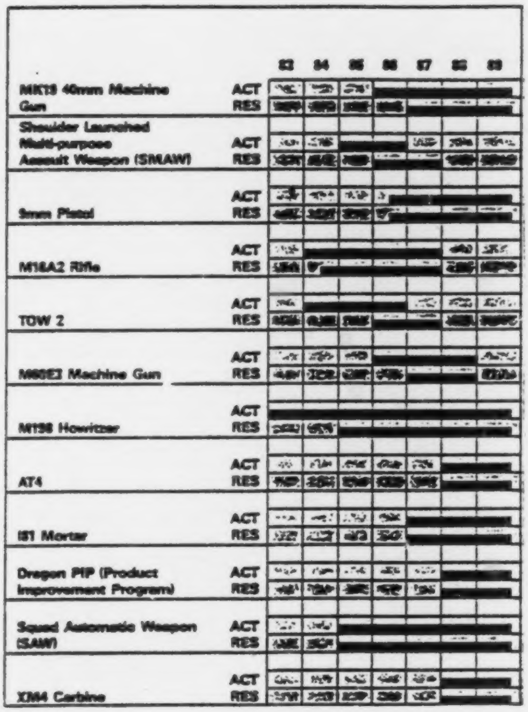
The Reserve currently has one aerial refueler squadron of KC-130's partially configured with the newest KC-130T. Ten aircraft have been delivered and are currently based at Naval Air Station, Glenview, Illinois, with the older KC-130F's. Four aircraft are scheduled for Calendar Year 1988 delivery, with two more anticipated for arrival during Fiscal Year 1989. The standup of an additional squadron at Stewart International Airport, New York, is moving ahead in the areas of personnel, aircrew training, flight-hour funding, and facility construction. The squadron will be activated during the last quarter of Fiscal Year 1988.

EQUIPMENT

Modern combat equipment is essential to readiness. Acquisition profiles have, for several years, provided concurrent fielding of equipment to the Active and Reserve components. In the concept referred to as the single acquisition objective, the total requirement for the entire U.S. Marine Corps is determined and procured.

While historically the Marine Corps has included the Reserve in developing acquisition objectives, equipment fielding to Reserve component units has usually lagged behind the Active component due to funding constraints. Funding levels, however, during the past 5 years, have allowed concurrent procurement of most equipment items. Examples of concurrent fielding plans, depicted on the following chart, demonstrate the Marine Corps' commitment to, and the beneficial effect of, the single acquisition objective concept:

CHART #2



The Marine Corps' goals of procuring standard combat equipment for our Reserve are being met. Today, over 96 percent of the equipment required for training is on-hand at our Reserve sites. Additional equipment required for mobilization is held at the Marine Corps Logistics Bases. Assuming current programs remain intact, the Reserve will approach their wartime equipment requirements toward the end of Fiscal Year 1990.

Marine Corps procurement funds in the amount of $42.6 million have been allocated for the Reserve component in Fiscal Year 1988. The Fiscal Year 1989 request for $43.5 million represents 3.75 percent of the Fiscal Year 1989 Procurement, Marine Corps appropriation. The requested funding level of $43.5 million will permit the purchase of new 5.56mm carbines, 9mm pistols, advanced narrowband digital voice terminal/tactical terminal, radar test sets, heavy and light cranes, field bath shower units, digital communications terminals, as well as other combat essential equipment. Distribution of funds allocated to Reserve component procurement is displayed below by commodity area. These figures are correct as of February 9, 1988, and are subject to change as realignments occur.

PMC PROCUREMENT PROFILE

(Shown in $ Million)

	FY86	FY87	FY88	FY89
Weapons and Tracked Combat Vehicles	29.6	23.0	3.3	5.3
Communication/Electronics Equipment	22.9	1.9	12.2	20.2
Support Vehicles	59.9	17.4	0.2	.5
Engineer Equipment	18.7	15.1	26.5	17.0
Spares and Repair Parts	1.4	0.6	0.4	0.5
Total	132.5	58.0	42.6	43.5

FACILITIES

Training facilities remain one of the most serious problems for the Marine Corps Reserve. The Selected Marine Corps Reserve currently occupies 193 training centers located in 46 states, Puerto Rico, and the District of Columbia. Fifty-five centers are managed or owned by the Marine Corps. The remainder are used jointly with other services.

Replacement, modernization, and expansion of Naval and Marine Corps Reserve facilities are funded through the Military Construction, Naval Reserve appropriation. Funding levels from Fiscal Year 1984 to Fiscal Year 1988 averaged $49.0 million. An average of $17.0 million of this amount was provided for projects benefiting the Marine Corps Reserve. However, the construction backlog jumped from $290 million in Fiscal Year 1982 to $997 million in Fiscal Year 1988.

Last year, $73.7 million was requested and appropriated. In Fiscal Year 1989, as a result of deficit reduction efforts, the Military Construction, Naval Reserve Appropriation request is $48.4 million. Although this will have limited impact on the burgeoning construction backlog, it does permit a minimum level program of training facility upgrading.

The addition of new weapons systems in the past few years to the Marine Corps Reserve have increased the need for improved training centers. Facilities also have a direct impact on recruiting and retention, let alone simple training and equipment maintenance. Force structure and mission changes are often difficult to implement without appropriate facilities.

TRAINING AND READINESS

Success on the modern battlefield requires the integration of manpower and equipment through an effective and imaginative training program. Exercises and other training programs, emphasizing Active/Reserve component integration, are designed to provide a highly trained Reserve manpower resource from which to draw Selected Marine Corps Reserve units or individual Marines in the event of mobilization. Programs aimed at professional development and military occupational specialty qualification are integral parts of the equation and imperative to successful warfighting.

Unit Training

Exercise participation affords reservists the same opportunities as active duty Marines to develop and maintain skills in command and control, fire support coordination, amphibious planning, and fire and maneuver. An active cycle of training is maintained which includes combined arms exercises, cold weather and mountain warfare training, and amphibious assaults. Unit participation in major exercises abroad and within the continental United States provided training to approximately 23,000 reservists during Fiscal Year 1987. The highlight for the Selected Marine Corps Reserve was Exercise Solar Flare conducted at Camp Lejeune, NC, during July 1987. Two complete Marine Expeditionary Brigades, one Reserve and one Active, participated in the largest force-on-force, freeplay exercise conducted by the Marine Corps. The most significant projected exercises for Fiscal Year 1988 are depicted in the following chart:

CHART #3

PRINCIPAL FY88 EXERCISES

EXERCISE	DATES	LOCATION	MAJOR UNIT	NUMBER PERSONNEL
Display Determination	Classified	Med	ITT's	34
Team Spirit	Classified	WestPac	3d CAG, 4th ANGLICO, IRR	150
Ocean Venture	Classified	Med	ITT's 4th ANGLICO,	59
Teamwork-88	Classified	OCONUS	1/25, 4th FSSG (-)	914
JOINT				
LogEx	Classified	VA	4th FSSG (-)	70
SMCR/Integrated				
Alpine Warrior	Classified	WI	4th FSSG (-)	232
CAX 7-88	Classified	CA	MWSG-47, MAG-20 MAG-42, 4th TkBn 4/14	3,174
Kernal Blitz	Classified	CA	2/25	729
CAX	Classified	CA	1/24, 2/14, HML-76,	1,260
FIREX	Classified	WI	1/14, 3/14	1,410
2d MAW Exercise	Classified	Europe	MWSG-47, WTS-47 HQ Sqdn-47	228

Training and Innovation

The Marine Corps Reserve continues to seek methods for applying emerging technologies in simulators and computer-aided instructional systems to enhance our training and combat readiness. The unique demands placed on our Reserve units to maintain military skills in compressed time periods, distant from live-firing ranges, have led to the research and use of state-of-the-art devices and ranges. Given the constraints under which the geographically dispersed reservists must operate, automated learning systems provide an optimum level of cost-effective training. Congressional support has helped us make strides in acquiring these systems.

The use of devices and simulators for reserve training falls into five general categories: marksmanship/gunnery, combat environment, command and control, maintenance training, and aviator training. The systems are used by individuals and units. These systems are used by the Reserve during drills or annual training duty.

Ranges and range devices under development or already fielded include the Multipurpose Range Complex, Small Arms Remote Targets, and Remote Engagement Target Systems. Marksmanship/gunnery devices and simulators include moving target simulators, the Precision Gunnery Training System, and the light armored vehicle gunnery trainer and a full-crew tank trainer. The Marine Corps will continue to exploit innovative training opportunities providing quality training and skill qualification programs tailored to the Reserve's needs. We are pursuing portable systems and military occupational skill instructional vehicles to enhance on-site skill qualification training for reservists during weekend drills. Your support has been instrumental in our progress to date.

INDIVIDUAL TRAINING

Training of individuals in the Individual Ready Reserve is accomplished through two programs. First, the Exercise Support Program provides small detachments and individuals the opportunity to participate in major exercises under the cognizance of Fleet Marine Force, Atlantic and Fleet Marine Force, Pacific. For instance, during 1987, 130 individual reservists participated in Exercise Team Spirit by deploying to Korea as part of III Marine Expeditionary Force.

The second means of training the Individual Ready Reserve is through the Reserve Counterpart Training Program, which is designed to provide Reserve officers and enlisted Marines the opportunity to train with active duty counterparts. Technical skill enhancement and proficiency in occupational skills, external to an exercise support environment, are the benefits of this program.

The anticipated increase of the Individual Ready Reserve by the end of Fiscal Year 1992 to more than 80,000 in response to the 8-year military service obligation presents a significant challenge to ensure military occupational specialty proficiency. To overcome this problem, the Reserve Counterpart Training Program is being increasingly used as a training vehicle. The Marine Corps Reserve Support Center began conducting skill refresher training in Fiscal Year 1987.

Another facet in our training program for reservists is attendance at professional schools. These schools are similar to those offered to the Active component, but tailored to the time available to reservists. They attend Reserve courses at the Marine Corps Amphibious Warfare School, the Marine Corps Command and Staff College, the Landing Force Training Commands, the Naval War College, and the U.S. Air Force Air War College. Candidates from the grades of warrant officer to colonel are competitively selected to ensure the most qualified individuals attend. The program has expanded to over 900 officers and 50 staff noncommissioned officers in Fiscal Year 1988.

BUDGET

The Fiscal Year 1989 Marine Corps Reserve budget request of $393.2 million will support enhancement initiatives discussed above and a Selected Marine Corps Reserve end strength of 43,600 (42,493 average strength). This funding represents 4.1 percent of the overall Marine Corps budget. Listed below is a comparison of Fiscal Year 1987 actuals, Fiscal Year 1988 appropriated levels, and Fiscal Year 1989 requested amounts.

FUNDING COMPARISON - Fiscal Years 87/88/89

RESERVE APPROPRIATION	FY87	FY88	FY89
Reserve Personnel, Marine Corps (RPMC)	$277.3M	$295.4M	$315.7M
Operation & Maintenance, Marine Corps Reserve (O&MMCR)	$ 64.0M	$ 69.5M	$ 77.5M
Total	$341.3M	$364.9M	$393.2M

The Fiscal Year 1989 Marine Corps Reserve Personnel budget provides $197 million for pay and allowances, retired pay accrual, subsistence, clothing, and operational travel for units and individuals during drills, annual training, and initial active duty for training. The other $119 million is for special tour requirements, mobilization training, the Full-Time Support program, incentives program, Platoon Leaders Course, and the Junior Reserve Officers Training Corps. The Reserve Personnel, Marine Corps increase of $20.3 million in Fiscal Year 1989 over Fiscal Year 1988 is necessitated primarily by a pay raise, addition of FICA payments for drills and an average strength increase of 396 in Fiscal Year 1989 within the Selected Marine Corps Reserve and Full-Time Support programs.

The Fiscal Year 1989 Marine Corps Reserve Operation and Maintenance request of $77.5 million provides funds for the day-to-day costs of supporting our units. The training of Selected Marine Corps Reserve units is directly supported by $38.2 million. Included are the costs of "expense items" of equipment, consumables, vehicle and airlift support, transportation of Marines and materiel, and unit maintenance of equipment. Depot-level maintenance of major end items of equipment is supported with $2.0 million. The Fiscal Year 1989 request also provides $37.3 million for the operation and maintenance of training facilities and administrative support of individual reservists, recruiting activities, and headquarters support.

Funding levels described for Fiscal Year 1989 are vital to our continued development as a full contributor to the Total Force. The modest increase in funds for manpower, training, equipment, and facilities will maintain our warfighting capabilities and is considered cost effective under our current fiscal conditions.

CONCLUSION

During the past year the Marine Corps Reserve has continued to strengthen and improve its combat readiness. Thanks to your support we are attracting high quality personnel who are better trained and equipped than ever before. I feel the role of the Reserve will increase over the next 10 years as Congress and the Department of Defense continue to face the challenges of tough fiscal constraints. Modernization efforts, force structure changes, and modest manpower growth require continued support in the form of equipment, training, and facilities to maximize our warfighting capability.

Mr. Chairman, I appreciate this opportunity to address your committee. You have been most supportive of our needs in the past, and we are grateful. Your continued support of our programs is solicited to maintain and further enhance our readiness posture.

AIR NATIONAL GUARD

STATEMENT OF MAJ. GEN. JOHN B. CONAWAY, UNITED STATES AIR FORCE, DIRECTOR, AIR NATIONAL GUARD

COMMENDATION OF SENATOR STENNIS

Senator JOHNSTON. General Conaway.

General CONAWAY. Thank you, Mr. Chairman. It is an honor for me to appear before you and also say some brief words about a great American, Chairman Stennis. I have been with him on many occasions. He has been such a tremendous supporter, not just of the Guard and Reserve, but of the total United States military.

He has helped immensely and taken the lead in helping to modernize the Air National Guard. Over 10 years ago we started modernization of our C–130's with some new C–130H's. That continues to this day.

He also has been instrumental in bringing organtic C–141's into the Guard and Reserve. And I might add, the C–141 unit that we have at Jackson, MS, was involved in the operation in the last week or so to Central America with four aircraft.

Senator Stennis has been a great supporter of our miscellaneous equipment account, which has helped us to upgrade our communications squadrons, as well as our tactical control and aircraft control equipment. Without the support of this great committee, the Air National Guard would not be in the high state of combat readiness that we are today.

COMMITTEE MEMBERS AND STAFF COMMENDED

When I look at what this committee has done, just this Senate Defense Appropriations Committee, in the last 11 years that I have been working with you for the readiness of the Air National Guard, the committee members and the staff are absolutely superb and have the Nation's best interests at heart. I appreciate that very much.

STATUS OF AIR NATIONAL GUARD

This is evidenced by fairly new F–15's standing air defense alert on the Gulf Coast in the Louisiana Air National Guard, doing a superb job. We also have one of the top communications squadrons at Hammond, La., as well as a telephone company, EI squadron, at Jackson Barracks.

And of course, Senator Stevens knows of the great units we have in Alaska airlift, and tanker, and now rescue that we are getting into the state. Your support has been greatly appreciated.

AUSTERE BUDGET

We have a very austere budget before you. It actually has minus 2.7 percent real growth for the Air National Guard, which I guess shows a sign of the times. We will maintain the highest readiness level we can with that, and definitely appreciate your support.

[The prepared statement of General Conaway follows:]

PREPARED STATEMENT OF MAJ. GEN. JOHN B. CONAWAY, USAF

DIRECTOR

AIR NATIONAL GUARD

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE, it is my pleasure to once again appear before this committee in support of the Air National Guard's FY 1989 budget request.

The Air National Guard today is larger and more capable than at any time in its history. Our current strength is over 114,000 men and women, while continued modernization of our aircraft and equipment makes us more capable of performing our assigned missions.

The National Guard is unique among the world's reserve military forces, combining both State and Federal missions. It provides the nation with an effective, economical military force for national defense and provides the states a trained, equipped and disciplined force capable of responding to emergencies at the state level.

FLYING UNITS

Air National Guard flying units perform a number of different and exciting missions. With nearly 1,750 total aircraft, our 91 units are organized to perform the following Air Force missions:

Mission	No. of Units	Type Aircraft
Tactical Fighter	34	A-7, A-10, F-4, F-15, F-16A/B
Theater Airlift	20	C-130
Aerial Refueling	12	KC-135E
Air Defense	12	F-4, F-15, F-16A/B
Tactical Reconnaissance	5	RF-4C
Tactical Air Support	3	OA-37
Rescue and Recovery	2	HC-130/HH-3
Strategic Airlift	2	C-141, C-5
Special Operations	1	EC-130E

The structure of our flying units remains stable at 24 wings and 67 groups, but there is a significant increase in quality and effectiveness as we continue to convert to newer and more capable aircraft. The following changes to ANG flying units have been publicly announced for the fiscal year indicated:

Unit	Action	In FY
Atlantic City, NJ	-15 F-106; +18 F-16A/B	88
Ft Smith, AR	-18 F-4C; +18 F-16A/B	88
Otis ANGB, MA	-15 F-106; +18 F-15	88
Stewart, NY	+3 C-5A (to 8 PAA)	88
	+3 C-5A (to 11 PAA)	89
Dannelly Fld, AL	-18 F-4D; +18 F-16A/B	89
Kingsley Fld, OR	-18 F-4C; +18 F-16A/B	89
McConnell, KS (RTU)	-36 F-4D; +36 F-16A/B	89
Moffett NAS, CA	-1 HC-130H; +1 HC-130P	89
	-1 CH-3E (to 4 PAA)	89
Hancock Fld, NY	-24 A-10; +18 F-16A/B	89
Suffolk Co, NY	-1 HC-130P (to 3 PAA)	89
Louisville, KY	-18 RF-4C; +8 C-130B	89
Willow Grove, PA	-18 OA-37; +18 OA-10	89
Nashville, TN	-4 C-130A (to 12 PAA)	89
Selfridge, MI	-6 A-7 (to 18 PAA)	89
	-18 F-4D; +18 F-16A/B	90

Unit	Action	In FY
Ellington, TX	-18 F-4D; +18 F-16A/B	90
Fresno, CA	-18 F-4D; +18 F-16A/B	90
Fargo, ND	-18 F-4D; +18 F-16A/B	90
Portland, OR	-18 F-4C; +18 F-15B	90

While not classified as conversions, the 158th Tactical Fighter Group, Burlington, Vermont, will become the 158th Fighter Interceptor Group and assume an Air Defense Alert mission on 1 April 1988, while the 130 TAGp, Charleston, West Virginia, will receive new C-130H aircraft during FY 89.

With the support of Congress and the Air Force, we will continue a program of modernizing our state operational support aircraft (OSA). Twelve states have received the C-12 OSA. They are Connecticut, South Dakota, Missouri, Nebraska, Massachusetts, Kentucky, Kansas, Iowa, Nevada, New York, Washington, and Vermont. During FY 1989, C-130H OSA will be assigned to McEntire AGB, South Carolina; Jacksonville, Florida; Montgomery, Alabama; and Meridian, Mississippi.

Air National Guard flying units make substantial contributions to the total Air Force combat capability and will fulfill a large portion of the force commitment during any future crisis. At the end of FY 1989, the Air National Guard will possess 86 percent of the total Air Defense Interceptor forces, 46 percent of the Tactical Reconnaissance forces, 36 percent of the Theater Airlift forces, 26 percent of the Tactical Fighter forces, 17 percent of the Strategic Aerial Refueling forces, 20 percent of the Rescue and Recovery forces, 8 percent of the Electronic Combat forces, 36 percent of Tactical Airborne Command and Control forces, and 6 percent of the Strategic Airlift Forces.

MISSION SUPPORT UNITS

While the flying units play a more visible role, our Mission Support Units are equally important to the success of the ANG. We have 239 independent and geographically separate units heavily concentrated in the areas of communications, weather, and civil engineering. An additional 310 units are collocated and integrated with our flying units. These units are primarily communications, medical, civil engineering, security, weather, and aerial ports. The following table shows the types of mission support units in the ANG.

Type of Unit/Mission	Number of Units
Medical	101
Civil Engineering	98
Security	89
State Headquarters Elements	54
Combat Communications	44
Weather	40
Tactical Control	29
Aerial Port	22
Engineering Installation	19
Bands	12
Air Traffic Control	8
Training Units	7
Host Base Support (BOS)	5
Aircraft Control and Warning	4
Permanent Field Training Sites	4
Direct Air Support Center Squadrons	3
Joint Communications Support	2

Type of Unit/Mission	Number of Units
Airlift Support Detachments	2
Reconnaissance Technical	2
Range Control	1
Field Training Flight	1
Tower Operations	1
Professional Military Education Center	1
Total	549

Like their flying unit counterparts, mission support units contribute heavily to the total Air Force combat capability. At the end of FY 1989, the Air Guard will possess 67 percent of the Air Force combat communications forces, 68 percent of engineering and installations forces, 24 percent of the civil engineering forces, 54 percent of tactical weapons control, 15 percent of the weather reporting and forecasting forces, 70 percent of the aircraft control and warning forces, 13 percent of medical support units and 12 percent of aerial port units.

EQUIPMENT, PERSONNEL AND TRAINING

I am proud to report that Air National Guard units continue to demonstrate their capability to perform their wartime missions. This is evidenced by ratings received from active Air Force teams during Operational Readiness Inspections (ORIs) conducted at our ANG units. These inspections are conducted using realistic wartime scenarios, and although not the ultimate test, they do provide the best available method of testing a unit's capability.

While we can boast of our inspection records, we still have some readiness shortfalls. Our most limiting readiness factor is the need for modern equipment. If we must go to war in partnership with our active component, we need to be equipped in the same fashion as the active force.

Over the past several years the Congress has taken a pronounced interest in supporting the Guard and Reserve forces by providing above-budget procurement funding. The millions of dollars approved specifically for the Air Guard have provided new C-130s, new Operational Support Aircraft, and, in FY 1988, new MH-60 helicopters for our rescue and recovery units. In addition, miscellaneous equipment monies have enabled the Air Guard to procure more modern communications equipment, needed medical equipment, safety equipment, and needed training devices such as Air Combat Maneuvering Instrumentation.

We still have some equipment shortfalls. Not all of our communications equipment is current vintage and needs modernization. We possess the only remaining C-130A's in the inventory which causes severe supportability problems. As we move into the F-15, F-16, C-141 and C-5 missions, we are experiencing some serious support equipment shortfalls which won't be satisfied for some time. While we are modernizing our fighter force with newer airframes, these are generally early model aircraft that require avionics systems upgrades to be competitive against the current threat. Our tactical fighter inventory has a serious shortage of Electronic Countermeasures (ECM) Pods. Our tactical and strategic airlift forces have no electronic capability for threat detection and no self-protection systems. In an effort to remedy these problems, we are actively participating on task forces along with other Major Commands.

Another important element in readiness is manpower. Manpower levels of the ANG have grown substantially over the last decade and is indicative of the missions being transferred from the active component to the Guard and Reserve components. Our FY 1989 military end strength request of 115,200 reflects a reduction of 2,500 from our original request and 700 below our authorized FY 1988 end strength. Much of this reduction is attributable to modernization of equipment while the remainder is the result of force structure changes.

Full-time manpower is vital to the success of the ANG mission and consists of a mix of Title 32 military technicians, Active Guard/Reserve (AGR) personnel and Title 5 civilians. The military technicians and AGR personnel are a highly trained cadre who accomplish the day-to-day workload and play an important role in the training of our traditional Guard personnel. The vast majority of our military technicians are in maintenance and support functions. Security, field training sites, ranges, detached alerts, aircraft operations, recruiting, retention and similar type functions that are military in nature are performed by AGR personnel. Title 5 civilians are employed here at the Headquarters and at those bases where the ANG has been designated as the host.

In FY 1987, we exceeded our technician strength program by a small amount, but remained within our AGR end strength ceiling. The flexibility of not having to hold technicians to an end strength ceiling allowed the ANG to support frequently changing manning requirements more efficiently without the burden of end-of-year employment interruptions. Our amended FY 1989 budget reflects an increase of 316 technicians and a reduction of 24 AGRs from our original request. Any reduction from our request will limit our ability to support specific mission, equipment and force structure changes planned for the ANG and will eventually effect our unit readiness objectives.

Although the ANG has consistently exceeded programmed strength levels, we still have some critical skill vacancies. At the end of FY 1987, a significant percent of these vacancies were in hard-to-fill skill areas such as maintenance for avionics systems, medical, munitions systems, aircraft armament/release and ground communications systems.

The single most successful inducement in attracting members to fill our vacancies and to retain our current members is the Montgomery G.I. Bill (MGIB). The high regard in which we hold this legislation is based on data accumulated over the last three years. The Air Guard has seen its percentage of six year commitments- a prerequisite for MGIB participation- increase from 15 percent in FY83 to 49 percent in FY87. This kind of force stability concurrently reduces training costs and improves combat readiness. As of December 1987, over 11,000 members (approximately 25 percent of the eligible population) were participating in the MGIB. ANG recruiters throughout the country tell us that the MGIB is their most effective recruiting tool. Although our FY 1989 budget fully funds MGIB requirements, we were required to fund $12.9 million of this requirement at the expense of essential school and special training programs.

The Air Guard is highly dependent on prior service personnel as a source of recruits. Since 1980, approximately 60 percent of our enlisted accessions are prior service personnel. In recruiting a high percentage of prior service personnel, we are able to utilize the skills of a trained and experienced person and avoid the high cost of basic military training and initial skills technical training.

Another element in readiness is training, which is probably our strongest element. Increased involvement in joint exercises and deployments with an increase in realism throughout our training program has made us more prepared for our wartime missions than ever before. Our personnel are very capable of using their currently assigned equipment. The only potential problem involves equipment modernization, and the need for training on new equipment. Our budget request adequately addresses this need, but any reduction could cause a degradation in readiness.

FY 1989 AMENDED BUDGET SUBMISSION

The Operation and Maintenance, ANG, appropriation supports the day-to-day operations of all ANG units. It funds payroll costs for military technicians and civilian personnel, flying hours, depot maintenance of aircraft and equipment, real property maintenance, medical and hospital treatment expenses incurred in non-federal hospitals, and the day-to-day supplies and services necessary during the normal course of operations. The appropriation is sub-divided into three budget activities- Mission Forces, Depot Maintenance and Other Support.

The National Guard Personnel, Air Force, appropriation funds the personnel costs of all full and part-time ANG members, the school and special training programs, subsistence and clothing costs, disability and hospitalization benefits, incentive payments, educational benefits, and retired pay accrual costs. This appropriation is sub-divided into two major groupings- (1) Unit and Individual Training which funds our drill strength personnel for their required inactive and active duty training, and (2) Other Training and Support, which funds the full-time active duty personnel, school and special training programs, and all other expenses associated with ANG personnel.

The following chart compares the revised FY 1988 funded position, the original FY 1989 budget request, and the Amended FY 1989 budget request for these two ANG appropriations.

	(Dollars in millions)			
Item	Revised FY 1988	Original FY 1989	Amended FY 1989	FY 1989 Difference
Operation & Maintenance, ANG	$1,958.1	2,030.9	1,965.4	-65.5
National Guard Personnel, AF	988.2	980.0	1,027.4	+47.4

The FY 1989 Operation and Maintenance budget request supports a flying hour program consisting of 442,158 flying hours, a Primary Aircraft Authorized (PAA) inventory of 1,537 aircraft, a military technician/civilian population of 25,368 personnel, our depot maintenance program, base maintenance and repair requirements at our facilities, and the day-to-day support needs for our budgeted end strength of 115,200 Air Guard personnel. Major factors comprising the $65.5 million reduction from our original FY 1989 budget submission are:

- Assumptions associated with Federal Employees Retirement System, FERS (-$20.7 million)

- Annualization of FY88 civilian pay raise and funds for proposed FY89 civilian pay raise (+$32.9 million)

- Inflation (-$2.9 million)

- Mission reductions (-$19.4 million)

- Non-fly depot maintenance reduction (-$19.9 million)

- General reductions and force structure changes (-$26.7 million)

- Other adjustments (-$8.8 million)

The FY 1989 National Guard Personnel, Air Force, request is based on an average strength of 113,700 Guardsmen and Guardswomen being assigned to our flying and mission support units. This average strength will support an end strength of 115,200 which is comprised of 107,252 drill strength personnel and 7,948 Active Guard/Reserve (AGR) personnel. Major items driving the $47.4 million increase over the original FY 1989 request are:

- Annualization of the FY88 military pay raise and the effect of proposed 4.3 percent pay raise on 1 January 1989 (+$45.7 million)

- Government's share of social security contributions for drill payments during FY 1989 (+$4.8 million)

- Impact of prior year strength growth (+$17.0 million)

- Change in retired pay accrual rates (-$7.6 million)

- Reduction in programmed growth of medical readiness (-$7.5 million)

- Reduction in Initial Skill Acquisition Training, Refresher and Proficiency Training (-$10.2 million)

- Other price and program changes (+$5.2 million)

CONCLUSION

The Air National Guard has proven to be an integral part of the Total Force. We exist to support national security objectives, while providing a State militia uniquely qualified for local disaster and public safety needs. Our responsibilities are global, national and local, and each offers its own set of challenges for the future.

The Air Guard is ready to meet these challenges. The capability of our citizen airmen to respond to the most demanding wartime missions is a matter of record. We appreciate the continuing, strong support of the Congress. Your support has permitted the Air National Guard to continue modernization and to make significant progress toward our goal of strength through readiness.

Mr. Chairman, this concludes my prepared statement and I will be happy to respond to any questions you may have.

AIR FORCE RESERVE

STATEMENT OF MAJOR GENERAL ROGER P. SCHEER, UNITED STATES AIR FORCE, CHIEF OF AIR FORCE RESERVE

UPGRADE OF AIRCRAFT

Senator JOHNSTON. General Scheer.

General SCHEER. I too would like to express my thanks for the honor of being here and make it unanimous in our deep gratitude for Chairman Stennis and what he has done for us over the past years. As a direct result of past actions by the Chairman and this committee, we are now flying modern aircraft.

In 1989 we will convert two more F–4 units to F–16's, and continue to build the C–5's and C–141's. We are now included in virtually all contingency planning with our active duty counterparts. And more importantly, our readiness far exceeds the standards that we enjoyed only a few years ago.

As an example, all of our flying units today are combat ready. For non-flying units, combat readiness has increased from 75 to 92 percent just in the last year. Medical manning is up to 93 percent.

And I think, as John just pointed out, our readiness and responsiveness are evident in the Honduran airlift last week, where five of our C–141's from Andrews responded within hours.

DEFENSE SYSTEMS SHORTAGES

We have some equipment shortages, particularly in the defensive systems, ECM systems for our tactical airlift and fighters. That is the main area we are working on along with upgrading our almost 30-year-old helicopter combat rescue fleet.

For training, ever more realistic simulators, aircraft simulators, are more exotic than ever. We are using computer-based training for our ground training. And last year, in response to this training, we had over 16,000 of our people deploy to overseas locations, over 7,000 of those to Europe alone.

So again, while we all share in the fiscally hard times, I think our readiness is at a level that perhaps a few years ago we would not have believed possible. And with your continued support, we will be able to see significant increases in the future.

Thank you, Mr. Chairman.

[The prepared statement of General Scheer follows:]

PREPARED STATEMENT OF MAJ. GEN. ROGER P. SCHEER, USAF

CHIEF OF AIR FORCE RESERVE

MAJOR GENERAL ROGER P. SCHEER

Major General Roger P. Scheer is chief of Air Force Reserve, Headquarters U.S. Air Force, Washington, D.C., and commander, Headquarters Air Force Reserve, a separate operating agency located at Robins Air Force Base, Ga. As chief of Air Force Reserve, General Scheer serves as the principal adviser on Reserve matters to the Air Force chief of staff. As commander of Headquarters Air Force Reserve, he has full responsibility for the supervision of all U.S. Air Force Reserve units around the world.

General Scheer was born Nov. 13, 1934, in Akron, Colo., and graduated from high school in Hinsdale, Ill., in 1952. He received a bachelor of science degree in mechanical engineering from the University of Colorado, Boulder, in 1957 and a master's degree in business adminstration from Central State University, Edmond, Okla., in 1977.

After receiving his commission as a second lieutenant through the University of Colorado's Air Force Reserve Officer Training Corps program, General Scheer earned his pilot wings in 1958 at Webb Air Force Base, Texas. He then completed training at Moody Air Force Base, Ga., and was assigned to Ramstein Air Base, West Germany, flying F-86D's with the 514th Fighter-Interceptor Squadron. In 1961 the general transferred to Spangdahlem Air Base, West Germany, where he served as standardization and evaluation officer with the 8th Tactical Fighter Squadron, flying F-100s and F-105s.

He returned to the United States in 1963 and was assigned to the 4th Tactical Fighter Wing, Seymour Johnson Air Force Base, N.C., as standardization and evaluation officer, flying F-105s. During the last six months of this tour of duty, he was on temporary duty at Incirlik Air Base, Turkey, as a member of a rotational squadron.

General Scheer then was assigned to the 67th Tactical Fighter Squadron at Kadena Air Base, Okinawa, in August 1965. Almost immediately, he was sent on temporary duty to Korat Royal Thai Air Force Base, Thailand, where in 1965 and 1967 he flew 168 combat missions. In July 1969 he transferred to the 355th Tactical Fighter Wing at Takhli Royal Thai Air Force Base, Thailand, where he served as operations officer and chief of standardization and evaluation and again flew F-105s.

In March 1970 he separated from active duty and joined Loewi and Co. in Chicago as a stockbroker. Eighteen months later, he went to work in the A-10 Marketing Division of Fairchild-Republic at Farmingdale, N.Y.

After the Air Force announced that the former C-124 Reserve unit at Tinker Air Force Base, Okla., would be the first Air Force Reserve unit to convert to a tactical fighter mission and be assigned F-105s, General Scheer applied for a full-time air reserve technician position with that unit. He subsequently joined the 507th Tactical Fighter Group at Tinker in early 1972, serving as operations and training officer for the 465th Tactical Fighter Squadron until January 1973 when he was named group commander. In May 1978 he became commander of the 301st Tactical Fighter Wing, Carswell Air Force Base, Texas. During his command, the wing and its subordinate units were equipped with F-4D's. The general served as deputy to the chief of Air Force Reserve at Air Force headquarters from April 1983 until May 1985, when he became commander of 10th Air Force, Bergstrom Air Force Base, Texas. He assumed his present position in November 1986.

MR CHAIRMAN AND MEMBERS OF THE COMMITTEE. Thank you for the opportunity to appear before this committee to present the amended U.S. Air Force Reserve program for Fiscal Year (FY) 1989 and to respond to any questions you may have.

Air Force Reserve units remain combat ready and well-trained, and are capable of being mobilized in 24 hours and deployed within 72 hours. The strength of our effectiveness as a partner in the Total Force continues to be productive interface with the Active Force, quality personnel, substantive missions, and modern equipment.

MODERNIZATION

Although budget deficit considerations have slowed our rate of growth, the Air Force Reserve will continue to modernize our airlift and fighter forces in FY 1988 and 1989. Systems modernization is essential if we are to interface closely with our Active and Guard counterparts in maintaining full combat readiness and capability.

Consequently, we are continuing to upgrade our tactical fighter force during FY 1988 with our second F-16 unit reaching its full complement of 24 production line F-16C/Ds. We appreciate your support in providing production line models of the F-16 for Luke AFB, Arizona. However, budget constraints are slowing down the previously announced program for modernization of the Air Force Reserve fighter force. Three F-4 units previously announced for modernization to the F-16A/B in FY 1988 and FY 1989 will now each convert approximately one year later. We hope, in time and with your support, to install various modifications which would ensure that these aircraft will remain viable throughout their lifetime.

The conversion of the remaining Reserve F-4 units to the more cost effective F-16 in the early 1990s must survive the current trend of reductions in defense spending. Any further cutbacks in planned F-16 and F-15 procurement levels will force our aging F-4D/Es to longer service, also seriously affecting our war fighting capability.

The extraordinary results of our fighter modernization in terms of combat capability, speaks for itself. For the second consecutive GUNSMOKE (a biennial world-wide fighter gunnery competition), our Reservists from the 419th Tactical Fighter Wing at Hill AFB, Utah produced first place trophies. In 1985 they won the top unit trophy shortly after their conversion to F-16A/B aircraft. This year Major Danny Hamilton of the 419th took Top Gun honors as the best fighter pilot in this major competition. Along with the first, second, and fifth places in the Top Gun competition, the 419th finished second among 18 fighter wings in the race for overall honors.

Due to the Congressional add of eight C-130H aircraft in the FY 1988 budget, the Air Force Reserve will retire its last C-130A tactical airlifter, at General Billy Mitchell Field, Wisconsin in FY 1989 -- and not a moment too soon. Thereafter, the only C-130As remaining in the Air Force Reserve will be the dated AC-130A gunships at Duke Field, Florida.

The Special Operations Group at Duke Field is manned with 1,000 personnel including 22 well trained and experienced, combat-ready crews. These highly motivated people received the only 'outstanding' awarded last year by the Military Airlift Command (MAC) Inspector General to a special operations force unit (active or Reserve). The Air Force procurement of the new AC-130U will release active duty upgraded H-model gunships to replace our A-models. Therefore, I urge your support for the AC-130Us in the current Air Force procurement budget.

The addition of eight new C-130H aircraft for our Milwaukee unit greatly enhances the combat capability of our airlift fleet while lowering overall operations cost. We have validated your confidence in the ability of our airlift units by using production line C-130H aircraft to win the annual AIRLIFT RODEO a world-wide airlift competition. Our Dobbins AFB, Georgia, unit finished first overall in 1985 and in 1987 the Maxwell AFB, Alabama, unit had the highest score for a C-130 in the best airlift wing category.

While the Air Force Reserve has been a long time partner in the Military Airlift Command's strategic airlift associate program (Reservists flying and supporting active duty aircraft daily), we now have achieved an increased strategic airlift profile at our unit equipped C-141 and C-5 wings. The 459th Military Airlift Wing (MAW) at Andrews AFB, Maryland, completed its conversion to 8 C-141B aircraft last year; the 433rd MAW at Kelly AFB, Texas, will complete its conversion to 15 C-5s in FY 1989; and the 439th MAW at Westover AFB, Massachusetts, which received the first of 14 C-5As last Fall, will receive the remaining C-5s in FY 1989.

These strategic airlift unit conversions allow us to operate and maintain these valuable airlift aircraft economically at a low peacetime tempo while maintaining a high wartime surge capability. Our MAC Associate program continues to be another cost effective means to conduct peacetime airlift while training to meet heavy wartime surge requirements. Our mission ready status was clearly indicated in last year's AIRLIFT RODEO, as the Reserve Associate wing at Norton AFB, California, was named the best United States airlift wing.

The U.S. Air Force mobility forces upgrade is dependent on the timely procurement of the C-17 aircraft. For the first time in our history, production line airlift aircraft are programmed for unit-equipped Guard and Reserve squadrons. The C-17 is also planned for existing C-141 Associate units, releasing C-141s to modernize Guard and Reserve C-130 units. We believe in the cost and mission effectiveness of the C-17 and strongly support its timely procurement.

In the area of combat rescue, the Air Force Reserve currently is operating 12 H-3 and 5 HH-1 helicopters. These aircraft are getting old and rapidly are becoming unsupportable. Therefore, it is important that the MH-60G procurement remain on track. If reduced funding slowed MH-60G production, it could create a situation where we would have to retire the old HH-3s before replacement aircraft could be made available. A temporary break in the mission would close these Reserve units and we would lose their experienced crews and support personnel. The high quality of these search and rescue personnel was demonstrated in FY 1987 when our rescue aircrews, pararescuemen, and support personnel received some of the most impressive awards in the 1987 annual International Search and Rescue Competition (SAREX). A Reserve team (the Aerospace Rescue and Recovery Squadrons at Homestead AFB, Florida, and Portland IAP, Oregon) claimed the best overall SAREX Award.

We are proud that our crews' high levels of experience and dedication, which coupled with the support of their families and civilian employers, have allowed our Reserve units to reach full mission capability with new equipment in record times.

SHORTFALLS

Although our flying units are well trained and demonstrate excellent combat capability, we need to improve our ability to penetrate enemy defenses. Using appropriated dollars to buy electronic countermeasures pods solves only a small part of the problem. Active and passive countermeasures are crucial to infiltrate the full spectrum of enemy defenses. Currently, we are working on a program to provide limited capability for our fighters and airlift aircraft. We look forward to your continued support as we develop and program systems in these times of reduced defense spending.

Due to the limited time available for aircrew proficiency training, the Reserve Components must make every minute count toward improving operational capability. To accomplish this, there is a critical need for the development and acquisition of state-of-the-art training systems, technologies, and procedures. These include self-paced programmed instruction, part-task trainers, multi-media learning programs, and computer simulation. Last year Congress responded to a portion of this need with an additional appropriation for a C-5 weapon systems trainer at Westover AFB.

OPERATIONAL ACHIEVEMENTS

Air Force Reserve flying units logged more than 220,000 unit equipped and associate flying hours in FY 1987, in our fighter, tanker, tactical airlift, strategic airlift, special operations forces, and rescue aircraft. As Reservists train, they also support requirements that would otherwise have to be satisfied by contract or active force resources. For example, the Air Force Reserve contribution to MAC channel missions represented more than 38,000 passengers, 59,000 tons of cargo, and 263 million ton miles. Our unit equipped airlift mission added more than 53,000 hours, 90,000 passengers, and 19,000 tons of cargo. Reserve associate C-9 medical evacuation crews logged 3,500 hours while transporting more than 9,000 patients.

In addition to routine training, members of our Air Force Reserve flying units recorded extraordinary firsts last year:

> An aircrew from McGuire AFB, New Jersey, airdropped the heaviest single load ever from a C-141: a 38,490 pound U.S. Army Sheridan tank.
>
> Two F-4 crews from Wright-Patterrson AFB, Ohio, were engaged in a dissimilar air combat tactics sortie off Iceland as part of a Checkered Flag exercise. They were diverted by the Air Force Iceland Command Post to augment two active duty F-15s, which had been scrambled to intercept two Soviet Bear-D maritime reconnaissance bombers prior to entering the Icelandic Air Defense Zone. The American fighter aircraft successfully intercepted the Bears southeast of Keflavik, Iceland, and escorted them away.
>
> The US Air Force Reserve also left its mark in November 1987 at the Strategic Air Command's bombing and navigation competition, when a crew comprised of representatives from each of our three KC-135E units won the Saunders Trophy as the best aerial refueling team.

In conjunction with proficiency training, our flying units are often requested to provide a variety of humanitarian services:

> Air Force Reserve rescue units were credited with saving 20 lives in FY 1987. A C-141 from McChord AFB, Washington, air-evacuated eight victims of the disastrous San Juan, Puerto Rico, New Year's Eve hotel fire to New Haven, Connecticut. Two Reserve units (C-141 Associate unit from Charleston AFB, South Carolina, and C-130 crews from Niagara Falls, New York) joined Military Airlift Command aircrews in providing disaster relief for earthquake ravaged Ecuador in February.

There are several missions unique to the Air Reserve Components, where our units accomplish remarkable feats with a combination of experience and ingenuity.

The Air Force Reserve provides 100 percent of the Air Force aerial spray capability. In one recent example of this mission, the Rickenbacker ANGB, Ohio, Reserve unit flew aerial spray missions last summer to suppress a potential disease epidemic in Puerto Rico.

The Air Reserve Components also provide 100 percent of the Air Force augmentation to the Forestry Service airborne fire fighting capability. A California C-130 unit (Air Force Reserve) from March AFB loaded a mobile aerial fire fighting system in their aircraft, and teamed with the Air National Guard to contain raging forest fires in Southern and Central California.

The Air Force Reserve made major contributions to exercise activities around the world in FY 1987. More than 32,000 Reservists participated in Joint Chiefs of Staff and Major Command (MAJCOM) command post and field training exercises. Some of the major events were: VOLANT OAK and PEGASUS' 87 in Central America; BRIM FROST in Alaska; TEAM SPIRIT, a Pacific theater exercise; and REFORGER an all service deployment to the European theater. In terms of tactical airlift support for these exercises, we deployed more than 37,000 troops, airdropping 14,000; and 4,000 tons of cargo, airdropping 500 tons of supplies and equipment. In addition to these exercises, an additional 250 deployments transported 7,000 personnel--all this, quite an accomplishment for the citizen airman.

OVERSEAS ROTATIONS

Because of this Committee's interest in the use of Guard and Reserve Forces overseas, I would like to go into more detail on the effort we make to support the Volant Oak commitment. In an operation which began in 1977, we continue to share this rotational duty in Panama with the Air National Guard in support of the Commander in Chief, United States Southern Command (USCINCSO). Our share of this requirement totals 26 weeks, broken into one 10 week and two 8 week rotations. At any given time, we are providing six C-130 aircraft, and seven crews, and associated support personnel for a total of 109 Reservists. Last year we flew 392 missions and 847 sorties carrying 8,500 passengers and 2,500 tons of cargo in support of requirements in Central America.

To support this mission we call on at least eight of our twelve USAFR tactical airlift units. Other than a full-time liaison cadre of five Guard and Reserve personnel, Reserve forces normally serve their commitment in Panama on two-week rotations. While the numbers on mandays or annual tours will vary, the annual average is 60% on annual tour and 40% on mandays. As you know, it's difficult to achieve significant savings by using Reservists at a high level of activity. Further, we do not have the resources to strap on very many commitments of the size and duration of Volant Oak without impacting our Reservists' relationships with their families and civilian employers.

We also gain overseas experience for our aerial port units by providing relief each summer for active aerial ports all over the Pacific. Also, throughout the year, Reserve aerial port squadrons augment airlift support to Osan Air Base in the Republic of Korea on a rotational basis.

MISSION SUPPORT UNITS

We are proud of the job done by our aerial port and other mission support units. While the flying units provide a significant portion of the Total Force, the Air Force Reserve also has a large combat support and mission support capability. Many of our combat support and mission support units as part of their training make significant peacetime contributions which assist in keeping the peacetime costs of the Total Force to a minimum. The Air Force Reserve provides 71 percent of the Air Force aeromedical evacuation units and 22 percent of the Air Force's tactical hospitals and clinics. Currently, Reservists contribute almost 60 percent of the aircraft battle damage repair capability with personnel in six Air Force Logistics Command-gained combat logistics support squadrons. Also, the Air Force Reserve represents 20 percent of the Air Force civil engineering force and equipment and nearly 50 percent of the aerial port squadrons. The majority of the combat support build from FY 1988 to FY 1989 is in our civil engineering force, including our new West Virginia squadron.

INDIVIDUALS

In addition to our unit program, the Air Force Reserve has a successful program to provide trained individual mobilization augmentees (IMAs) to the active force upon mobilization. IMAs are members of the Selected Reserve and are assigned to specific positions established in active force organizations. They are trained and supervised by the active force. We are requesting an IMA end strength of 13,482 for Fiscal Year 1989 an increase of 782 over the FY 1988 programmed end strength of 12,700. The FY 1989 end strength translates to an average strength of 13,018 in FY 1989.

Another group of individuals, the Individual Ready Reserve (IRR) are also ready to serve, if mobilized. Again in FY 1989 we are planning to screen approximately 25,000 Individual Ready Reserve (IRR) members. We were pleased that, as expected, our FY 1987 results showed that the large majority of the USAFR IRR members had accurate addresses, reported for screening, and, if mobililized, could be utilized with very little additional training.

FY 1989 AMENDED BUDGET SUBMISSION

The Operation and Maintenance, USAFR Appropriation supports the day-to-day operations of all USAFR units. Major items funded by this appropriation are payroll costs for military technicians and civilian personnel, flying hours, depot and field-level maintenance of aircraft and equipment, real property maintenance, and the day-to-day supplies and services necessary during the normal course of operations.

The Reserve Personnel, Air Force Appropriation provides for the pay and allowances of Reservists during their active and inactive duty training periods, while performing special tours of active duty, and while undergoing school training. It also includes funding for Reserve personnel called to full-time active duty for training, administering and recruiting for the Air Force Reserve program. Also included are the military personnel costs of students enrolled in both the Senior and Junior Reserve Officers Training Corps (ROTC) programs and students participating in the Armed Forces Health Professions Scholarship Program (HPSP). Although ROTC and HPSP programs are not managed or controlled by the Air Force Reserve, their costs are included in this appropriation.

The Military Construction, USAFR Appropriation funds minor and major construction projects at USAFR facilities, as well as planning and design for future construction projects.

The following chart compares the revised FY 1988 funded position, the original FY 1989 budget request, and the Amended FY 1989 request for the three major USAFR appropriations.

(Dollars in Millions)

	Revised FY 1988	Original FY 1989	Amended FY 1989	FY 1989 Difference
Operation & Maintenance, USAFR	$1,001.0	1,070.4	1,028.5	-41.9
Reserve Personnel, AF	615.1	616.5	655.3	+38.8
Military Construction, USAFR	79.3	59.3	58.8	- 0.5
Total	$1,695.4	1,746.2	1,742.6	- 3.6

The next chart compares the difference in manpower strengths between our original and amended budget submittals.

(End Strengths)

	Funded FY 1988	Original FY 1989	Amended FY 1989	Orig/Amend Difference
USAFR Military End Strength	82,400	85,500	83,600	-1,900
Drill (Memo)	81,731	84,831	82,943	-1,888
Full-Time (Memo)	669	669	657	-12
USAFR Civilian Strength	14,571	14,679	14,577	-102
Technician (Memo)	9,994	10,052	10,004	-48
Non-Technician (Memo)	4,577	4,627	4,573	-54

The FY 1989 Amended Budget Submission when compared to the original FY 1989 Submission includes the following force structure and program changes that impact the Air Force Reserve:

KC-135E program reduced by 310 flying hours.

KC-10 program reduced by 603 flying hours.

NATO Airbase Satellite Communications (NABS) II manpower reduction. NABS II is a system that provides secure jam-resistant communications for NATO units. Due to budgetary constraints, the Air Force canceled the purchase of the NABS communications equipment which negated the requirement for 116 USAFR enlisted personnel to operate and maintain the equipment.

General Billy Mitchell Field, Wisconsin, unit programmed to convert from C-130A to C-130H aircraft due to Congressional add of eight (8) C-130H aircraft in FY 1988.

Rickenbacker AFB, Ohio, unit programmed to convert from C-130A to C-130E aircraft.

Peterson AFB, Colorado, unit reduced from 16 to 12 C-130B aircraft.

Headquarters personnel reduction. Ten (10) civilians at Headquarters Air Force Reserve and 15 civilians at Headquarters numbered air forces reduced.

Air Reserve Personnel Center (ARPC), Denver, Colorado, personnel reduction. One (1) officer, five (5) enlisted, and 31 civilians at ARPC reduced.

Tinker AFB, Oklahoma, unit conversion from 24 F-4D aircraft to F-16 aircraft delayed until FY 1989/2 instead of FY 1988/3 and number of F-16 aircraft to be received decreased from 24 to 18.

Homestead AFB, Flordia, unit conversion from 18 F-4D to 18 F-16A/B aircraft delayed from FY 1989/1 until FY 1990/1.

Wright-Patterson AFB, Ohio, unit conversion from 18 F-4D to 18 F-16A/B aircraft delayed from FY 1989/1 until FY 1990/1.

Non-programmatic O&M reduction of $0.8 million to air rescue and recovery service (ARRS) and special operations forces (SOF) units.

One (1) Portland IAP, Oregon, HC-130 aircraft, one (1) Homestead AFB, Florida, HH-3 aircraft and one (1) Duke Field, Florida, AC-130A aircraft are transferred from primary aircraft inventory to backup aircraft inventory.

CONCLUSION

In summary, the combat readiness and war fighting capability of the Air Force Reserve continue to be vital elements within the Total Force. Modernization, and training will continue as our primary concerns as we train to defend America during this time of reduced defense spending.

We are proud of our achievements for 1987, and even more proud of our families and employers who supported these accomplishments. Successful service to the Air Force and our country takes the combined effort of the member, family, and civilian employer. Without this teamwork, the inconveniences of absences from home and office, attendance at frequent training activities, and all hour availability would be difficult to endure. The splendid assistance Congress has given our Reservists, their families, and employers is gratifying; and I am confident this consideration will continue in the second session of the 100th Congress.

This concludes my statement, Mr. Chairman. I will be happy to answer questions and to provide any additional information you deem necessary.

TABLE 1

DEPARTMENT OF THE AIR FORCE

AIR FORCE RESERVE PERSONNEL

	FY 1987 (ACTUAL)		FY 1988		FY 1989	
	END	AVERAGE	END	AVERAGE	END	AVERAGE
FLYING UNITS	37,665	37,149	38,565	37,858	39,012	38,345
MISSION SUPPORT UNITS	26,770	26,205	28,383	27,028	28,174	27,875
INDIVIDUALS	12,969	12,680	12,700	12,785	13,482	13,018
STATUTORY TOURS	299	299	320	305	308	295
RECRUITERS	330	321	349	330	349	349
NON-PRIOR SERVICE ENLISTED PROGRAM	1,697	1,431	1,425	1,220	1,425	1,220
NON-PRIOR SERVICE ENLISTED PERSONNEL AWAITING TRAINING	685	975	658	671	850	688
TOTAL SELECTED RESERVE	80,415	79,060	82,400	80,197	83,600	81,790

TABLE II

DEPARTMENT OF THE AIR FORCE

AIR FORCE RESERVE FORCE STRUCTURE, FLYING UNITS

	END OF FISCAL YEAR		
EQUIPPED UNITS	1987	1988	1989
C-5 Strategic Airlift	1	2	2
C-141 Strategic Airlift	1	1	1
C-130 Tactical Airlift	14	14	14
Aerospace Rescue & Recovery	3	3	3
WC-130 Air Weather Service	1	1	1
HH/CH-3E Special Operations Force	0	1	1
AC-130 Special Operations Force	1	1	1
KC-135 Strategic Refueling Tanker	3	3	3
F-4 Tactical Fighter	5	5	3
F-16 Tactical Fighter	2	2	4
A-10 Tactical Fighter	5	5	5
Total Equipped Units	36	38	38
ASSOCIATE UNITS			
C-141 Strategic Airlift	13	13	13
C-5 Strategic Airlift	4	4	4
C-9 Aeromedical Evacuation	1	1	1
KC-10A Tanker Cargo	3	3	3
Total Associate Units	21	21	21
**TOTAL UNITS	57	59	59

**These units also include over 250 support units such as Consolidated Aircraft Maintenance Squadrons, Weapons Systems Security Flights, Mobility Support Flights, etc.

TABLE III

DEPARTMENT OF THE AIR FORCE

AIR FORCE RESERVE FORCE STRUCTURE, MISSION SUPPORT UNITS

	END OF FISCAL YEAR		
	1987	1988	1989
Combat Logistics Support Squadrons	6	6	6
Aeromedical Evacuation Units	21	21	21
Medical Service Units/ Contingency Hospitals	18	18	18
Aerial Port Squadrons	68	68	68
Civil Engineering Squadrons/Flights	57	58	59
Civil Engineering Squadrons (Heavy Repair)	1	1	1
Communications Security Squadrons	2	2	2
Basic Military Training Squadron	1	1	1
Numbered Air Forces (Reserve)	3	3	3
TOTAL	177	178	179

GENERAL QUESTIONING

COMMENDATION OF SENATOR STENNIS

Senator JOHNSTON. Thank you for your excellent statements. I appreciated especially your words about Senator Stennis. We are all indebted to Senator Stennis and what he has done for the country and what he has done for the Guard and Reserve. We appreciate your saying so.

Senator Stevens and I and all of us on this committee have learned a lot from Senator Stennis through the years. And some of the things we have learned have been about the Guard and the Reserve, about its value, about its cost effectiveness, about the need for us to support it. And we do not intend to change that support simply because Senator Stennis is rotating off the committee at the end of this session.

REDIRECTION OF DEFENSE FUNDING

We intend to keep up our strong support, whether the administration intends to or not. Now, we do have a fixed amount of outlays, budget authority, for the defense function. So we cannot increase overall the defense. That has been fixed in the summit agreement and everybody understands that.

So we are going to have to live with that. However, that does not mean we have to cannibalize the Guard and Reserve, as this budget has done, and I think unfairly done and inappropriately done.

Secretary Duncan, OMB sent a list of "wasteful projects included in the appropriation reports." That is a quote. In the March 15 memorandum which I have here, the OMB director suggested that the agency head redirect these funds to higher priority projects.

ANG EQUIPMENT AND ARMORIES

Included in Director Miller's withholding list are $290 million in Guard and Reserve equipment and $12.5 million for repair and renovation of Army National Guard armories. What is the Department of Defense position on this issue?

Mr. DUNCAN. Mr. Chairman, I frankly do not know. I only recently became aware of that memorandum, and I have not heard the General Counsel or the Secretary state the Department's position on the matter. So I frankly cannot speak for the Department on the issue. I would certainly take any report from a committee of Congress very seriously.

ITEMS LISTED IN COMMITTEE REPORTS

Senator JOHNSTON. We listed these things in the committee reports. That has been a longstanding tradition, that we list our priorities in the reports. We do not want to put them in the statute. But it is understood and appreciated through the years that those reports are binding. They are not just musings of the committee; they are intended to be binding.

Secretary Miller says here: "I remind you and ask that you remind all employees of your agency that congressional reports have no force of law. They are not approved by votes on the floor of either house of Congress, nor are they presented to the President for his signature."

Of course, we can put all that right in the statute. It is not as if we do not have the votes to put it in the statute that we put it in the report. We put it in the report because that is the tradition and we do not want to weigh down the statute with micromanagement of all the details.

But we will certainly do that if OMB is going to say that these have no force of law and please disregard them. That is exactly what we are going to do, and I hope that DOD will come to our aid on that.

It is a much better thing to do to have these priorities listed in reports. We do it in all our Appropriations Committees. I mean, in my Subcommittee on Energy and Water we list Corps priorities that way, and the Corps has always, almost always, respected those.

And we hope DOD will in this case as well, because we meant those to be binding.

Senator STEVENS. Would the Senator yield?

Senator JOHNSTON. Certainly.

Senator STEVENS. Well, last year in the omnibus continuing resolution that the Congress passed, we did in fact put in a provision that said spending on the items in this bill shall be in accordance with reports that accompany each title. So in this case, Mr. Miller is not even basically correct.

REPROGRAMMINGS

And we are getting daily reprogramming requests that reprogram items in the report. I suggest it is time for Defense to have a meeting with Mr. Miller, because the items of that bill that we passed last year that are most in jeopardy by Mr. Miller's letter are defense items.

We picked up funds that were lapsing from prior years and rejuvenated them and carried them over into 1988 and 1989. If Miller's letter is followed, it will be a great deal more than $290 million. The loss to the Department of Defense will be in the billions.

And we will be glad to detail that for you if you would like. But I have never seen such utter nonsense to come from someone who is near the status of a Cabinet officer. And I am personally chagrined about it.

Also, I am happy to see he is leaving to go back to Texas.

Senator JOHNSTON. Thank you, Senator Stevens.

General Temple, has DOD instructed you not to procure this equipment?

General TEMPLE. No, sir, I am not aware of it.

Senator JOHNSTON. Has DOD implied or formally disagreed with OMB on these, do you know, Secretary Duncan? Anybody who can answer?

Mr. DUNCAN. I am not aware that the Department has taken a formal legal position on the matter, and I have not discussed it with the general counsel, as I say, or the Secretary. Certainly I will.

Senator JOHNSTON. We would like your response for the record on that, please.

[The information follows:]

The Department's intention is to execute those programs, or possibly, in a few cases where that is not practical, to request permission to use the funds for higher priority items.

ARMORY ASSISTANCE AND REPAIR IN LOUISIANA

Senator JOHNSTON. General Burdick, some of the armory assistance is for Louisiana. Could you review the requirement for armory assistance and repair?

General BURDICK. Certainly the funds provided over the years have certainly contributed to the maintenance of our armories and are needed.

Senator JOHNSTON. Well, would you agree with OMB that these are State-owned facilities and should be financed solely by the States?

General BURDICK. Well, sir, they are to a certain degree State-owned facilities. But the mission of the Guard has taken on such a new role in recent years that there is some thought that increased Federal funding is required to support strictly Federal activities in these armories.

Certainly our armories are in need of the repair and maintenance funding that should be provided for these strictly Federal operations.

CHALMETTE GUARD UNIT

Senator JOHNSTON. General Conaway, the Guard unit down in Chalmette is alive, well, healthy, and happy, I trust?

General CONAWAY. Yes, sir, they are doing very well. They are on alert on a daily basis.

Senator JOHNSTON. With your permission, I would like to personally go down and check them out on the F-15 again. Without my guidance down there, sometimes the discipline gets a little sloppy.

General CONAWAY. I know Colonel Thibodeaux will look forward to your guidance and counsel.

Senator JOHNSTON. Tell him I am on my way soon.

MANNING OF NAVY FRIGATES

Gentlemen, I have a goodly number of questions here. Let me ask one about Navy frigates. Admiral Smith, the 1989 budget proposed decommissioning, of course, the 16 frigates. Our understanding is that putting the ships in reserve would cost as much and possibly more than the current cost to maintain these frigates in the active Navy. Am I correct on that?

Admiral SMITH. I am not in a position to give you cost figures on that, Senator. I know the Navy is developing those figures.

The input that I had in that was to say that, if we are going to man these ships the way we have to man them, it will increase the cost. The first thing is that we cannot man the two ships that are at Pearl Harbor. We do not have the people there to satisfy that requirement.

Regarding the other 14 ships, we have looked at whether or not we would man them or how we would man them. If we did it by local manning, we would fall short. For example, if we were to try to man the four ships at Mayport and use all of the available appropriate rates and ratings in that area, we could only achieve 42 percent manning.

But to do that, we would also have to stand down a number of essential units at Mayport. I would be reluctant to do that. To man the frigates, then, we would have to go inland. The resources are there, but we see the necessity to change some of our units inland. And we could do that on a priority basis.

We would then have to fly those sailors to the ships. And to give you a typical scenario, we would be looking at a Friday evening and, some of these young folks having to leave their job early. We are looking at contract airlift because we do not have enough airlift in the Navy and commercial airlift will not do it.

Having to leave their job early, get to the airport, get aboard the plane. The plane would probably make another stop. By the time it would get to Mayport, lose an hour in the time zones, we are talking about those sailors getting there late in the evening.

Then they go aboard the ship. They are underway that night, standing watches all day Saturday. Sunday they come back in, same thing in reverse again, back to their jobs early Monday morning.

We see that as being hard. We can do it. We are concerned about the cost and concerned about how we would maintain or retain those people working in those conditions.

Senator JOHNSTON. Thank you very much for your answer, Admiral Smith. That is a very complete answer.

You might send—I am sure DOD or the Department of the Navy will send along a copy of their report. But you might furnish it when you receive it on the cost.

Senator Stevens.

Senator STEVENS. Thank you very much.

We do appreciate your comments concerning Senator Stennis. As you were stating them, I was reminded that for me to serve the same length of time as Senator Stennis has served on this committee, I would have to see five new Presidents inaugurated.

You are going to soon face the problem of dealing with lieutenants. The general is going to retire, so I urge you to plan accordingly. We need all the assistance we can get. I join in the statement that the Chairman has made and I would hope that we can find some way to deal with some of the problems we are facing.

REDUCTION IN TACTICAL FIGHTER SQUADRONS

Generals Conaway and Scheer, you have a reduction in 12 Guard and Reserve tactical fighter squadrons from 24 to 18 aircraft. And I am told the savings are $5 million.

And yet, I think that the damage to the force structure far exceeds that. Can you explain to us how that came about? Maybe, Mr. Secretary, you would like to tell us about the 25 percent reduction in the Air Guard units involved. They are first line tactical fighter squadrons. I do not understand why we should do that and maintain the regular squadrons at substantial increased cost.

What is the background of that policy?

Mr. DUNCAN. Well, in brief, Senator, the argument can certainly be made that the operating costs of maintainingthose F-16's with air guardsmen is cheaper than the operating cost of doing it with active duty officers. From the Department's standpoint, I can tell you that all of the arguments that can be advanced in support of that general thesis were considered fully and taken into account, as were all of the issues respecting the budget for the Guard and Reserve, and discussed within the Defense Resources Board.

And beyond that, we made our decisions, which not everybody is happy with. But we have to make those kinds of hard decisions. So we made the decisions we thought were appropriate under the circumstances, trying to strike a proper balance.

Senator STEVENS. We just heard Admiral Smith talk about the minesweepers on duty when they were needed, and I read last night that almost 100 of our people from Alaska are down in Panama. There is not much publicity about the people in Panama, but they are there.

I do not quite understand a policy that reduces the tactical fighter squadrons to which we gave first-in-line equipment for a savings of $5 million. I do not think that even rings up in your cash register.

I do not want to sound like I have been here too long, but $5 million does not come across on the DOD cash register, does it?

Mr. DUNCAN. That is not a significant amount of money in the context of the overall Defense budget, no, sir.

I would simply respond in this way. When we ask the services to give their best judgment and explain how they can meet the budgetary goals and criteria we set forth, given our general approach to how we would meet those budgetary goals, the services make certain recommendations. We react to those recommendations and discuss them in the Defense Resources Board.

We recognize that most of our decisions are going to be subject to some criticism from several different directions. We made our decisions, and we think under the circumstances we made the right decisions.

Basically, those kinds of decisions originate within the respective services.

SUCCESSFUL INVESTMENT IN GUARD AND RESERVE UPGRADING

Senator STEVENS. Well, this committee has since 1983 or 1984 put almost $4 billion in new equipment for the Guard and Reserve, and now we are seeing that new equipment taken down. I am going to tell you flatly I am going to oppose that. I cannot understand that.

We fought too hard for that money for those new fighters for the Guard, and I think we ought to fight a little harder. We actually see a better force with the Reserves with the tactical first-line equipment and the esprit de corps that they have since they know they have it.

I just cannot quite understand that decision. That $5 million could well be saved somewhere else.

Having said that, let me thank you all, those involved in the Sixth Light Division structure. I know several of you have been involved in that.

We are going to have to round out the Sixth Light Division with a new Guard battalion, and it really is going to require a change in plans and facilities. That was the decision that was made on the basis that it would be less expensive for that battalion to be brought in rather than to establish a new Army full-time regular duty battalion.

Can you tell me if the current plans for the facilities and housing for that deployment are consistent with your plans here in this budget? The new Guard battalions to be formed for the Alaska National Guard in Anchorage are to round out the brigade at Fort Richardson?

General TEMPLE. May I reply to that, sir, from the National Guard side?

As you know, I made a rather extensive trip through Alaska in February, and it was about the time that the plan was being formulated.

Yes, it is onstream. I am not convinced that all of the construction dollars are there to support the activities, but that is an issue that is being developed at the National Guard Bureau at this time.

Senator STEVENS. I see my friend from Tennessee here. I have to talk to him about a little problem of additional armory to take care of that battalion. I think he will understand the savings in the long run from what we have done.

SEARCH AND RESCUE MISSION

Let me ask you General Conaway. We now have the problem of assuming the long-range search and rescue mission in Alaska from the regular Air Force to your Air National Guard units in Alaska. Most people do not recognize the problem of that function.

Since World War II, it has been performed by the regular Air Force, and now it is transitioning to you with the deactivation of the Air Sea Rescue unit at Elmendorf. It, again, will save funds. There is no question about that.

But living in a State that is wider than the South 48 and deeper, literally, as you know—put my State on the map of what we call the South 48, and the Aleutian Chain goes beyond San Francisco, and Ketchikan is somewhere down below New Orleans, and Barrow is somewhere up above Duluth.

When you talk about search and rescue in a place like that, the only people that have the long-range capability for rescue have been the Air Force.

Are you going to be able, do you believe, to assume that mission now and to really assist the Alaska Guard tofill in this gap that is going to be created by this transition?

General CONAWAY. Yes, sir. We are working very closely with Air Force, the commander of the Alaska Air Command, and the commander of MAC to work this transition as smoothly as we can. When we get our equipment, the Kulis unit at Anchorage International, will be able to pick up the mission under the direction of Colonel Taylor, who is replacing Colonel Lindemuth, upon retirement next month.

But sir, we are working very hard to make that happen on schedule.

Senator STEVENS. I am belaboring this. This committee provided the funds at my request last year for the new helicopters and the HAC–130 refueling tankers that were necessary for that purpose.

Only this week have I been told that the Air Force has chosen to deactivate the existing unit and the new equipment is not scheduled to come onstream until next year. That is going to leave about a year.

For those of us who fly around that country of ours, it is a very disturbing prospect that for a year there will be no long-range search and rescue unit.

Are you familiar with that decision?

General CONAWAY. Yes, I am familiar with what they are working. The only part that I have control over is to try to keep my hand in it, speed it up as much as possible, and to keep that gap as narrow as possible in light of the Air Force decision to go out and, of course, the Air National Guard coming into that business.

We will need all the support we can get to keep that gap as close to zero as possible.

AIR SEA RESCUE IN ALASKA

Senator STEVENS. I am going to call on my colleagues, if necessary, to ask the Air Force to come back and explain that.

I think that most people just do not understand that air sea rescue. I am glad that you have the capability or will have the capability to take it over.

General CONAWAY. Sir, I know the importance, having been up there on many occasions, as you know. Before I went to Alaska, I thought my home State of Kentucky was considerably larger than Alaska, but I found out after a few trips up there I can get lost in one county. You have some counties larger than our State.

We know the need for it, and we are helping.

Senator STEVENS. I have overextended my time already, but I have to tell you, my friend, I do not see the answer yet. They say they are taking their planes out, and we know your planes will not even roll off until next year.

Now, that was not the understanding that we had last year, and, Mr. Duncan, I urge you to take a look at that. That is a gap that is going to be sizable.

I want to point out to you that most of the people who have been involved in rescue, those who have been rescued, have been military people who are down in training in the remote areas of my State.

We have a Civil Air Patrol that deals primarily with the civilian side in most communities, but we are talking about pilots and jets that have crashed and problems that develop in military units in training in the very remote areas of Alaska.

To me, it is a real crime to see the one unit go and the other one not even come into being for more than a year. I do not think it can exist that way.

General CONAWAY. The only other thing we could do, General Scheer and I, maybe there is some way we could do some temporary TDY or something until the unit came up to speed.

But part of the problem, which you hit on earlier, is that some of this equipment that came up in the 1988 report is tied up in the debate between OMB and OSD.

Senator STEVENS. Yes, it is. That is part of it.

SITUATION ON NAVY FRIGATES

I will make only one statement as I close, and that is to Admiral Smith. I hope you will do something about those frigates. At least a substantial portion of it ought to go into the Naval Reserve. We have the capability somewhere in this country, I think, to have units that will take those and keep them up and be as ready with them as the people were with minesweepers.

I would urge you to come to us with a plan as to how you could use those frigates.

Senator JOHNSTON. Senator D'Amato.

Senator D'AMATO. Mr. Chairman, I am just going to ask that my prepared statement be included in the record as if read in its entirety.

[The statement follows:]

PREPARED STATEMENT OF HON. ALFONSE D'AMATO

U.S. SENATOR FROM NEW YORK

Mr. Chairman, I welcome to this hearing the Assistant Secretary for Reserve Affairs, Stephen Duncan, and the Chiefs and Directors of the National Guard and Reserve units. I look forward to their testimony.

The Administration has requested $16.3 billion for the National Guard and Reserve for fiscal year 1989, an increase of roughly $160 million over this fiscal year's estimate of $16.16 billion.

These forces must be adequately supplied, trained and manned. With the increased reliance on our reserve components, the end strengths of these forces must be at a level near wartime requirements.

But as resources become more scarce for our active forces, they become even more so for our National Guard and Reserves.

With better integration into our active forces, the guard and reserve units play an increasingly vital role in our national defense strategy. It is imperative then that these forces be not only well-equipped, but in a constant high state of readiness. The increased readiness of our guard and reserve units translates directly into increased readiness of our total armed forces. I look forward to hearing your ideas, gentlemen, on how this can be maintained.

The quality of our reserve components has improved measurably over the last several years, in no small part due to the leadership of those present this morning. It is my hope that notwithstanding possibly severe budget limitations, your leadership will allow this progress to continue during this year and next.

Thank you, Mr. Chairman.

NIAGARA FALLS DETACHMENTS

Senator D'AMATO. I have three questions that I would like to submit for the record, two of the three dealing with the interceptor group and the air alert detachment at Niagara Falls, and the third issue is basically——

Senator JOHNSTON. By whom are they being attacked? Newlyweds?

Senator D'AMATO. It is the same situation as we have experienced in some other areas.

I do not want to impinge on the graciousness of my colleague from Tennessee, Senator Sasser, who has another meeting to attend, as do I, but I would like to say that if there is going to be a conversion, let us make the conversion a good one and go, instead of to F-16's, to F-15's. That is one.

Secondly, I do not believe in funding the air alert detachment in Niagara Falls. That is by way of question and very strong sentiment from this Senator. You are going to need all the help you can get. I do not have to say more, do I?

If I see them going to other areas, this Senator is not going to be happy.

The third thing is, General Temple, I am really pleased to see that the Guard has become very much involved in the war on drugs with the missions you have undertaken, let me just encourage you to undertake as many of them as you can, and do not get trapped in that legislation that says it is not preparing for readiness. The war is afoot. It is here. It is now, and you can play a great role.

I am encouraged by what I see, and I ask if you have any plans to continue it?

Again, I thank my colleague for his indulgence.

RESERVE/NATIONAL GUARD

Senator JOHNSTON. Senator Sasser.

Senator SASSER. Thank you, Mr. Chairman.

General Temple, I have a document here entitled Reserve and Guard Program Summary, Department of Defense Budget Justification.

It starts out by saying, and I quote, "The budget continues to emphasize the increased role of the Reserve/National Guard."

Now, it appears to me that some bureaucrat down in the bowels of the Pentagon wrote that statement, because the Government did not write it because it simply does not square with the facts, quite frankly.

I have served for 12 years here in the Senate, and the Guard and Reserve budget this year is the worst budget submitted during my entire tenure in the Congress. I do not think this budget was put together fairly. I think senior officials at the Pentagon said, well, we have to spread these cuts around, everybody has to be cut.

That is fair enough, and I would agree with it if that statement were true. But the fact is that, in my judgment, this budget discriminates against the most cost effective and efficient component of our total military force, and that is the Guard and Reserve.

Now, for example, in the subcommittee that I chair, Military Construction, the Guard and Reserve components face what I think are unreasonably high reductions, as high as up to 30 percent.

Now, we are going to correct some of those inequities in the Military Construction Subcommittee, and I suspect that this subcommittee is going to correct some of the inequities as well.

You may have heard of this. I expect the grape vine works pretty fast. I took the liberty yesterday of reading some of your testimony, General Temple, to Secretary Marsh, to General Vuono, and I particularly read that portion stating that your helicopter crews would not even get enough flying hours to maintain proficiency.

Now, candidly, I do not think Secretary Marsh and General Vuono were fully aware of the impact that this budget was going to have on the Guard and on the Reserve. They said they were going to go back and take a look at it.

I hope they do because half of the Army is now made up of the Guard and the Reserve and will become even more so, in my judgment, as relative budget resources available for defense continues to contract. The importance of the Guard and the Reserve is going to increase, not decrease.

Let us face facts. The only way we are going to be able to maintain force structure in tight budget times is to convert some active units to Guard and Reserve units. Those are the simple facts of life.

GUARD AND RESERVE RESPONSIBILITY FOR STRATEGIC AIRLIFT MISSIONS

Now, General Conaway knows how I feel on this particular subject. For years I have been trying to get the active Air Force to let the Guard and Reserve perform the bulk of the strategic airlift missions.

I think the C–141 should be almost, if not completely, turned over to the Air Guard, but the active force continues to stand in the way even in the face of budget reality.

Now, what is going to happen one of these days if the active force continues to want to hold on to all of the strategic airlift? We are going to end up grounding some of the active airlift aircraft simply because we cannot afford them.

Secretary Carlucci is telling us and telling you that he is going to have to peel $200 billion off this budget in the next 3 years.

So I do wish, General Conaway, that we could do a better job of persuading General Cassidy that he is going to be a lot better off in the long run by letting the Guard and the Reserve assume more of these missions.

TACTICAL AIRLIFT UNITS

Lastly, with regard to the Air Force, the budget assumes that two tactical airlift units, that is the C–130 aircraft, are going to be reduced by four aircraft each. One of these units happens to be in my State of Tennessee.

I do not understand that, General Conaway. Why are we reducing aircraft in the Air Guard inventory when we have the active Air Force having great difficulty keeping pilots in service? The active Air Force is up here asking for more incentives costing billions of dollars to keep their active pilots.

At the same time we find ourselves, it appears to me, cutting aircraft deployed with the Guard where we have pilots with many hours, pilots with great proficiency, clamoring to get in the Air Guard. It just does not make much sense.

Instead of cutting these units, we need to be providing them with more new aircraft.

I am going to bring this up with the Secretary of the Air Force and with the Chief of Staff when they come before the committee. I will be working with this committee and the Armed Services Committee to make some changes in the budget that has been proposed.

Now, I have no specific questions of you, General Temple, or of you, General Conaway. I do have one for Major General Moore.

I would like to get both of you to comment on my comments here.

FLYING HOURS

General TEMPLE. Let me begin with the issue of the flying hours which you raised yesterday to the Chief of Staff and the Secretary. I am grateful that you did that; at least, I think I am grateful. I have not seen the Chief of Staff today. I might not be so grateful.

[Laughter.]

General TEMPLE. I understand I will be seeing the Secretary this afternoon.

Senator SASSER. I think you should get some good news.

General TEMPLE. We have already gotten good news. The Chief of Staff is personally interested, and I believe that he agrees with your summation.

What had occurred in the posture statement was that there was an error in establishing an operational tempo for flying hours for the Army as a requirement where that should have been as a desired goal.

That notwithstanding, I think you fortunately brought to the attention of the leadership of the Army that there is a requirement to increase the flying hour capability of the Guard even though from 1988 to 1989 there has been an increase in the number of dollars in the budget; but because of restructuring and the higher cost of flying, we really end up with a decrement. I believe that will be straightened out.

There has been a good deal of discussion in the last 24 hours, and all the indications are that General Vuono was personally interested in the issue. I want to say thank you, I think.

Senator SASSER. I think he is genuinely interested. Frankly, I am not sure he is fully aware of the problem.

General TEMPLE. Let me, if I can, extend beyond that on some issues.

TRAINING

You did not point to the matter of training. You have indicated that you have seen the Guard and the Reserve make significant improvements over the past few years which are really a payback to the American people who have been putting their trust in the reserve forces.

We, like the other components, both the Army and the Air Force, have suffered some severe decrements this year insofar as training.

We in the National Guard probably feel it more visibly than anyone simply because we are taking people out of private life and asking them to devote precious time to their military activities. When we have to make some significant reductions in our ability to meet the training objectives that we set out for them, then I think that hurts not only the vital interest of the United States but maybe, more importantly, the security of the individuals who are serving in the Guard and Reserve who we have to put very high in our priority list.

I want you to know that from my standpoint I am concerned about the loss of training support which is available to the Army National Guard, and I believe that General Conaway would reinforce the same thing insofar as the Air National Guard.

With that, General Conaway, if you have anything you want to add.

CUTS IN FORCE STRUCTURE

General CONAWAY. Sir, I might add a comment on the cuts General Scheer of the Air Force Reserve and I from the Air Guard got our day in court. The Air Force budget is very tight. We did not want to take any cuts in our force structure.

The Air Force is deactivating several units. They elected not to deactivate any Air National Guard units, but to try to maintain somewhat of a balanced force between the active, Guard and Reserve. The balance that they are looking at is to try to draw down some fighter units from 24 to 18 and a few airlift units from 16 to 12. So everyone with over 18 fighters and over eight airlift aircraft is being looked at.

We tried to avoid this. We would like to avoid it, but they want everyone to share and keep a balanced Air Force.

Now, it does present different problems for us because we have a more static stable force and we cannot PCS those people like Colonel Follis' unit at Nashville. It is true that we will lose that combat capability if they go from 16 to 12. We would rather not, and we are sure the country would rather not, but these are the kind of hard decisions the Air Force has had to make.

General Scheer has a unit in Colorado Springs right now which is the same way.

Senator SASSER. I am going to question those decisions pretty closely when the Secretary of the Air Force comes before the committee.

One final question, Mr. Chairman.

MARINE CORPS MODERNIZATION OF AV-8B HARRIER

General Moore, it is my understanding that the Marine Reserve has had some difficulty achieving necessary levels of modernization in its air assets, and I am speaking specifically of the AV–8B Harrier.

Could you please detail for the committee your current status in this regard?

General MOORE. Yes, sir. Concerning the AV–8B, the light attack aircraft we are flying within our Reserve is the A–4, which is 20-some-odd-years-old. Today, all of our regular forces are converting to the AV–8B. As you are well aware, Senator, in Tennessee we have an A–4 outfit.

We in the Reserve, in order to be a full player in our total force concept, need to have the same aircraft as the regulars. We would like to convert our A–4's to the AV–8B so that we can deploy, interchange and train with the regular force.

If you are going to be a total force, it mandates that you have the same equipment in the Reserve as in the active components, or else you will have tomaintain separate training lines, supply pipelines and, of course, you cannot augment with either individual augmentation or with units without establishing and maintaining separate logistic trails.

So we very much need to modernize in the light attack aircraft area with the AV–8B in the Marine Corps Reserve. Of course, certainly, we would like any support we could get in that area.

Senator SASSER. Thank you, General Moore.

EFFECTIVENESS OF MARINE CORPS RESERVE

I have been impressed for a long time with the readiness capability of the Marine Corps Reserves, and I think the taxpayers really get a terrific bang for the buck out of what we invest in the Marine Corps Reserve as well as all the rest of our Reserve.

General MOORE. If I might add to that, today the Marine Corps Reserve is using approximately about 4.1 percent of our Marine Corps budget, but we are providing about 25 percent of the structure and some 33 percent of the manpower. So I think that alone gives you an indication of what you are buying for your dollars in the Marine Corps Reserve.

Senator SASSER. Thank you, gentlemen.

Thank you, Mr. Chairman.

Senator JOHNSTON. Thank you.

We have some questions for the record for Senator Byrd, Senator McClure, Senator Weicker, and Senator Leahy.

We have a vote shortly.

Senator Proxmire will use the time between now and the vote. Then we will come back after the vote, and Senator Cochran, if you will help yourself to such time as you want after the vote. I will not be here at that time, so please return at your own speed.

Senator Proxmire.

STATE GOVERNORS REACTION TO GUARD AND RESERVE UNITS IN HONDURAS

Senator PROXMIRE. Secretary Duncan, how many governors, if any, have said no to sending troops to Honduras?

Mr. DUNCAN. You mean since we just sent the 3200 in the last few days, or over the last several months?

Senator PROXMIRE. Well, I want both. I would like your response to both.

Mr. DUNCAN. General Temple has the specifics, but my understanding is two or three.

General TEMPLE. We have only made requests of two governors who have indicated that they would not permit their National Guard to deploy to Central America.

Senator PROXMIRE. What States were those?

General TEMPLE. Ohio and Massachusetts. However, though she was not asked, the Governor of Vermont has expressed publicly that she would not, and there are several others who have joined in the suit.

Interestingly enough, the originator of the first suit, the Governor of Minnesota, Governor Perpich, has never precluded his forces from deploying to Central America, although he was the basis for the suit questioning the constitutionality of the Montgomery Amendment of 1986, I believe.

So right now the issue is that even though Governor Celeste of Ohio indicated that he would not, he and I have had an opportunity to meet. I invited him to join me in Central America. He did that. We then met at the Governor's Conference in Michigan, and he indicated to me that the Ohio National Guard would deploy, and they would do the best darned job of anybody we had there, although he personally disapproved of the policy.

I understand he has written to Secretary Carlucci making a request that the survey teams which are scheduled to be in Honduras within the next 30 to 60 days, I believe, be delayed. I do not know what the Secretary's response to that will be.

In the case of——

REQUIREMENTS OF MONTGOMERY AMENDMENT

Senator PROXMIRE. What is your understanding of what the Montgomery Amendment requires.

General TEMPLE. Say again, sir?

Senator PROXMIRE. What is your understanding of what the Montgomery Amendment requires? In other words, if a governor says no, you cannot have the troops, you think you want those particular Guard units, is there anything that the Defense Department can do?

General TEMPLE. Yes. There is a number of steps that can be taken to withdraw Federal support for the State that has precluded their units from deploying, and in addition, we could remove the Federal recognition of the unit that was in question.

Let me extend upon that a bit, and in the case of Governor Dukakis of Massachusetts, who has publicly stated his opposition to the deployment of his 13-man public affairs detachment to Panama, which might incidentally have some members traveling to Honduras to cover some news stories, he has publicly stated that he would permit them to deploy, but then has brought suit in the courts in Massachusetts. That suit has not been heard yet.

As you probably know, the suit in Minnesota had been heard by the lower courts. It ruled in favor of the Federal Government in the lower courts. It was then appealed. The appeal was heard on February 9 of this year, and there has been no ruling on that appeal from the Minnesota suit.

So as we stand now, no governor has indicated that he would violate the law, though the Massachusetts detachment is scheduled to depart sometime in early May, and we will see how that unfolds.

Senator PROXMIRE. Do you want to comment further, Mr. Secretary?

Mr. DUNCAN. No, I was going to give you the legal status of both cases, but the General did.

I have nothing further.

CONTRIBUTIONS OF WOMEN IN MILITARY

Senator PROXMIRE. Mr. Duncan, women have made many excellent contributions to the military, but never more than they do now. It is my understanding that more than 10 percent of our military forces are now female, the largest proportion in the world, and literally ten times higher as a percentage than it was 20 years ago, as I understand it. And I think that is one of the reasons why the personnel in the military has sharply improved from the standpoint of educational attainment, intelligence test records, AWOL and so forth. Women have a better record, as I understand it, than men, and the overall record of all the troops together has been better.

I am concerned about the fact that it is partly because women have come in more recently, that there are so few women in positions of command. For example, as I understand it, although women constitute 10.9 percent of the military personnel, there are very few colonels, maybe 1 or 2 percent; and even fewer brigadier generals, and no woman has an office higher than brigadier general.

What is the reason for that other than the fact that they have only come in in large numbers in recent years?

Mr. DUNCAN. I do not have an answer for the precise reason, Senator. I might note parenthetically, I am making my own contribution to that. My daughter is a student at the Naval Academy at the moment, so I follow that issue with some interest.

All I can say is that this has received the personal attention of Secretary Carlucci, Secretary Green, and we worked together on addressing those kinds of issues, and we do it on a regular basis.

So I wish I could summarize for you and tell you a single, specific reason. I cannot.

WOMEN IN GUARD AND RESERVE

Senator PROXMIRE. Well, how about in the Guard, the Guard and the Reserve? It seems to me that—I know that there are a number of women who are in the Guard in my State of Wisconsin, but nationally is the proportion about the same as it is in the regular?

Mr. DUNCAN. Roughly the same as with the active duty forces. We see drilling women across the board in all the Guard and Reserve units in all the States, doing as much as they are in the active forces.

Senator PROXMIRE. How are they doing from the standpoint of positions of authority and command?

Mr. DUNCAN. Well, authority and command, obviously—I do not offer this as an excuse, but simply as an observation—command positions become available after you have served several years, and we have had substantial increases in the numbers of women serving in the armed forces in recent years. At least a partial explanation is many of them are still very junior officers working their way up the promotion ladder.

DEPLOYMENT OF C-130H AIRCRAFT

Senator PROXMIRE. General Scheer, I saw in your statement that eight C–130H aircraft are scheduled to be deployed at the General Billy Mitchell Field in Wisconsin. That means that the last C–130A will be retired at that unit.

Can you provide a status report on that deployment for us?

General SCHEER. Yes, sir. That is true, thanks to your support, we will have those airplanes there. I do not have the exact production rates when we will have all of them on the line, but the people are all in place now, and it is a matter of accepting the airplanes and being fully ready, literally at the same time.

MODERNIZATION OF FIGHTER AND AIRLIFT AIRCRAFT

Senator PROXMIRE. General Conaway, the Air National Guard has undertaken, as I understand it, a modernization of its fighter and airlift aircraft, but I notice in your prepared statement that many of these planes lack adequate avionics, especially electronic countermeasures, to compete against the present threat. I also read in the annual report of the Reserve Forces Policy Board that they recommend giving the modernization of this avionic equipment a budgetary priority.

Can you tell us what problems the Air Guard faces if modern avionics are not placed in its planes, and also what time table and costs for upgrading the avionics on the new planes you are deploying.

General CONAWAY. Yes, sir. We both, in the Air Guard and Air Force Reserve, face that same problem. We are getting some newer equipment. Of course, we have A–10's, F–15's, F–16's, but ECM is a critical problem. There is not even enough electronic countermeasure equipment in the Active Air Force. It is a high priority. We need the help. We are second and third in line to receive that equipment, and it is an area that would probably take in the neighborhood of $30 million to $50 million a year for the next several years for us to start updating and have the sets to go to war. Obviously, survivability is greatly increased with updated electronic countermeasure equipment.

Senator PROXMIRE. And you have the support to go ahead?

General CONAWAY. No, we have limited support for that. It is one that is not fully funded at all, and the Guard and Reserve are near the bottom of that funding profile in the Air Force.

Senator PROXMIRE. We will see what we can do about that.

READINESS COMMANDS FOR WOMEN

Mr. DUNCAN. If I might, one additional comment on your question about women in command. The Navy is opening up the Readiness Commands for command by women, and they will be serving in those positions, and Admiral Smith advises me that they will be opening up next year. And that is a rather senior position within the Naval Reserve command structure.

Senator PROXMIRE. That is good to hear. Thank you very much.

Senator STEVENS. The Chairman is not coming back, and I would like to——

SUBMITTED QUESTIONS

Senator PROXMIRE. I just have three more questions that I will ask for the record, and yield, of course, to Senator Stevens.

Senator STEVENS. That is what I want to do. I want to put Senator Cochran's questions in the record and ask you to respond to them, and I would like to make one other request, and that is, Mr. Secretary, I would like you to give to the committee a listing of the equipment and materiel that you propose to deploy in the National Guard and Reserve units to any State in which the governor has revised to allow the Guard or Reserve to be trained out of the United States.

It is my intention that if it proves to be what I think it is, to put an amendment in this bill saying that no new equipment will go to any such unit.

Thank you very much.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

QUESTIONS SUBMITTED BY CHAIRMAN STENNIS

Budget Priorities--Active vs. Reserve Forces

The statements of both General Temple and Ward refer to the Guard and Reserve as "a bargain." I fully agree. The Guard and Reserve provide combat power and support at a fraction of the cost of active forces. The 1989 budget, however, treats the active and reserve forces the same. Budget cuts and manpower impacts are allocated to both.

QUESTION: Secretary Duncan, given that Guard and Reserve are a bargain, in a period of budget cutbacks shouldn't we be adding force structure and personnel in the Reserve components? Wouldn't this maintain force structure while saving funds?

ANSWER: Dependence on the Reserve forces to provide combat and support capabilities is not only wise, militarily, it also makes sound economic sense, and it is consistent with this Nation's tradition of reliance on citizen-soldiers.

The fact that we continue to place more reliance on the Guard and Reserve is significant. We have encouraged the Services to continue to look to the Guard and Reserve to fill those roles and missions for which they have a demonstrated capability. However, we must maintain an overall balance in the assignment of missions to our Active and Reserve forces in order to provide the necessary blend of wartime/crises capability and cost effectiveness which is consistent with the projected threat.

OMB WITHHOLDING OF GUARD/RESERVE APPROPRIATIONS

QUESTION: Secretary Duncan, OMB has sent out a list of "wasteful projects included in appropriation reports." In a March 15 memorandum, the OMB Director suggested that agency heads "redirect these funds to higher priority projects." Included on Director Miller's withhold list are $290 million in Guard and Reserve equipment, and $12.5 million for repair and renovation of Army National Guard armories. Is DoD going to let the Administration label the Guard and Reserve equipment and armory assistance "wasteful Congressional spending?" Is Secretary Carlucci going to let OMB impound these funds?

ANSWER: I do not personally believe that it is "wasteful" to appropriate money for Guard and Reserve equipment when there is a clear need for it. I would add that the Department of Defense has very great respect for guidance that is contained in committee reports.

OMB WITHHOLDING OF GUARD/RESERVE APPROPRIATIONS

QUESTION. General Temple, are you aware of any higher priority projects than equipping the Guard and Reserve with modern equipment?

ANSWER. From the National Guard's perspective, equipment shortages are a very serious problem. To echo the Annual Report of the Reserve Forces Policy Board, the overall value of reserve component equipment shortages is approximately $14.7 billion. Almost $10.9 billion of the shortage is in the National Guard. Considering the size of the shortfall in the National Guard, equipping our forces with modern equipment is obviously a very high priority.

MANPOWER

All your statements emphasize the importance of full-time support and drill end strength growth. However, the budget freezes strength at the 1988 level and, in fact, reduces strength by 40 thousand from the original 1989 submission.

QUESTION. General Temple, what impact will freezing full-time and drill strength have on the Guard?

ANSWER. End strength requirements are established based on force structure requirements. Over the last few years, end strength levels have been driven by the need to fill our increasing force structure as additional missions were added to the Guard. The end strength of the Army National Guard is frozen at FY 88 levels in FY 89. In terms of Wartime Required Strength, it means the ARNG shortfall will increase from 6% to 7% in FY 89. This reduction will not impact on the ARNG's ability to meet a C3 or better readiness level. The Air National Guard's FY 89 strength declines by 2,500 from its original request and is 700 below the the authorized FY 88 end strength. The impact of the drill strength decrease in the Air Guard, also, will require that some wartime shortages remain unfilled until funds become available.

The FY 89 Air Guard full-time civilian support, military technicians plus Title V civilians, declines by 4 end strengths from FY 1988 while full-time AGR support increases by 112 from FY 88. This leveling off in full-time manning will not create any severe impacts on mission accomplishment as full-time requirements are not increased to any great degree. The Army Guard has a minimum requirement for an additional 2,000 AGRS, 1,136 of which are required just to fill new unit requirements. Without additional AGR strength in FY 89, these new unit requirements will have to be filled by transferring full-time personnel from units that are currently resourced.

QUESTION. Is force structure being frozen too? If not which units lose strength to create new units?

ANSWER. Force structure in the Army National Guard is not being frozen. The ARNG will activate those high priority units that can be equipped, such as the three air defense battalions. New units are being stationed in areas where existing unit are overstrength. We anticipate that the new units can be manned without directing specific, existing units to decrease strength.

The Air Guard's force structure is actually being reduced, not to create new units, but as an action necessary for the Air Force to meet its fiscal constraints. This decline is the result of a total Air Force restructuring. To meet their established budget targets, the corporate Air Force elected to reduce force structure across the total Air Force, which includes the Air National Guard and the Air Force Reserve. Nobody wanted to reduce a structure that took years to build, but in light of budget constraints, few alternatives were available. The end result is a small Air National Guard force.

QUESTION: All your statements emphasize the importance of full-time support and drill strength growth. However, the budget freezes strength at the 1988 level and, in fact, reduces strength by 40 thousand from the original 1989 submission. General Temple, what impact will freezing full-time and drill strength have on the Guard? I'd like to hear from the other Guard and Reserve Chiefs on this issue, if any would like to comment.

GENERAL SCHEER: Air Force Reserve drill strength is based upon validated wartime requirements that can be funded within budgetary constraints. Freezing Reserve drill strength will mean that some valid wartime needs cannot be met. The level of full-time support is determined by the number of drilling Reservists and the number and types of missions assigned to the Air Force Reserve. However, due to budgetary constraints in recent years, the Air Force Reserve has been unable to obtain the number of full-time support personnel needed to support its missions and train the Reservists already authorized. Between FYs 1976 and 1987 the percentage of full-time support to unit end strength actually declined from 25% to 20% due to a combination of force modernization efficiencies, support unit growth, and imposed budget reductions. A freeze on full-time manning will prolong the current deficient situation.

QUESTION: What impact will freezing full-time and drill strength have on the Guard? I'd like to hear from the Guard and Reserve chiefs on this issue, if any would like to comment.

ANSWER: The effect of lost growth in Army Reserve paid drill strength and AGR categories is significant and has broad implications. The growth in USAR force structure supported by this programmed end strength is an integral part of the fabric of the Army's long term modernization program. Growth in existing units results from reconfiguring them to new designs consistent with the active and ARNG units they support on the battlefield, and from the integration of modernized systems. New units fill voids in our capabilities to provide coherent forces to support the warfighting CINCs under current doctrine and in the current threat environment. Wholesale cancellation of these actions would cause severe turbulence in the USAR. This turbulence would require several years from which to recover, potentially unhinge important parts of the total Army's warfighting capability, and probably result in significant costs.

We have, therefore, opted for a prudent measured response to these reductions. We will proceed with execution of the USAR FY89 force structure program essentially as planned, and consciously accept the attendant modest increase in hollowness of some units for the short term. We will then work to reduce this hollowness over a period of several years through a combination of initiatives. Each year we find that some programmed structure cannot be executed as planned for a variety of reasons. Beginning this year, we will manage our program even more intensely than in the past, identify these problem actions as early as possible, eliminate those that we find can not be executed, and redistribute the resources. We will also review the force and focus on units that have long term readiness problems. Those that cannot be brought up to standards within available resource constraints will be considered for inactivation. Integral to that effort is the acknowledgement that the demographics of the United States are changing and some units will have to be relocated to attain/maintain acceptable strength levels based on the changing recruiting environment. Finally, if necessary, we will select units with the lowest priority for support of the warfighting CINCs as candidates for inactivation over the long term so that remaining resources can be applied to the most critical warfighting and support needs.

FREEZE MANPOWER LIMITS

Question: All your statements emphasize the importance of full time support and drill strength growth. However, the budget freezes strength at the 1988 level and, in fact, reduces strength by 40 thousand from the original 1989 submission. I'd like to hear from the other Guard and Reserve Chiefs on this issue, if any would like to comment.

Answer: The freeze on end strength at the Fiscal Year 1988 level impacts primarily on the Full Time Support (FTS) program and on Selected Marine Corps Reserve (SMCR) ability to man structure at 100% wartime strength.

As you are well aware, the Marine Corps has a significant investment of Active Component personnel in support of the Reserve establishment. The FTS increase in the Fiscal Year 1988/1989 Presidential Budget was requested to enhance our ability to organize, administer, recruit, train, and instruct the Marine Corps Reserve. The reduction of 340 FTS billets from the request will impact on our warfighting readiness at a time when our planners have placed increased reliance on our Reserve force in mid to high intensity conflicts.

A relatively modest end strength increase to 44,500 in Fiscal Year 1989 proposed in the Fiscal Year 1988/1989 Presidential Budget also included drill strength growth and an expansion of our Individual Mobilization Augmentation (IMA) program to 1705. Strength reductions will delay our goal of manning the 4th Division/Wing Team at 100% wartime strength by 1994. Additionally, growth in the IMA program will be straight lined at the 1300 level.

GUARD AND RESERVE

QUESTION: All your statements emphasize the importance of Full-Time Support and drill strength growth. However, the budget freezes strength at the 1988 level and, in fact, reduces strength by 40 thousand from the original 1989 submission.

-- I'd like to hear from the other Guard and Reserve Chiefs on this issue, if any would like to comment.

ANSWER: The importance of drill strength growth is to meet the mobilization requirements with the required number of trained Reservists. Critical to the effective training and management of the Selected Reserve is having an adequate cadre of Full-Time Support personnel. If we are to have growth in drilling strength, there must be an accompanying increase in Full-Time Support.

GUARD/FORCE STRUCTURE

QUESTION: Is force structure being frozen too? If not, which units will lose strength to create new units?

GENERAL SCHEER: Air Force Reserve force structure has not been frozen. It is programmed to decline. In 1989, the 507 Tactical Fighter Group at Tinker AFB, Oklahoma will lose six aircraft during its conversion to F-16s; the 302 Tactical Airlift Wing at Peterson AFB, Colorado will lose 4 C-130B aircraft; the 305 Aerospace Rescue and Recovery Squadron (ARRS) at Portland International Airport, Oregon will lose one HC-130 aircraft; the 301 ARRS at Homestead AFB, Florida will lose one H-3 helicopter; and the 919 Special Operations Group at Duke Field, Florida will lose one AC-130 gunship. The total personnel impact of these programmed actions will be the loss of 45 Reserve officers, 354 Reserve enlisted, and 86 civilian authorizations. None of these personnel is programmed to be used to create new units.

EQUIPMENT

Since fiscal year 1984, Congress has appropriated over $3.8 billion, $1.2 billion in 1988 alone, above levels requested by the Administration for the Guard and Reserve dedicated procurement account.

Question. Could each of the Chief's please tell the Committee how these funds have been used and what effect this additional funding has had on the readiness of units under their control?

Answer. Congress has provided $705M since fiscal year 1984 to procure equipment to improve Army Reserve unit readiness. The acquisition strategy is to purchase mission essential equipment for deployable and training base units. Critical items such as CUCVs and MII3A3s have been received and are a positive influence on the readiness of 245 units. Equipment ordered and due-in is expected to increase the readiness posture of over 2000 units. Significant improvements in medical, transportation, engineer and maintenance unit readiness will be realized in approximately 18 months when the majority of these items are scheduled for delivery.

Question: The Reserve components have always had a lot of control over the funds in the dedicated procurement account. We have been told in previous hearings that the Chief's can identify shortfalls and quickly obligate funds in the dedicated account. Given the degree of control that rests with the Guard and Reserve, why does it appear that these dedicated funds are being obligated at a slower rate than active procurement accounts?

Major General Ward: There are several reasons for the slower rate. One is that although my staff manages the funds, the logistics and procurement expertise and resources lie with the Army Material Command. Coordination between the two has until recently been through reimbursable procedures, an awkward and at times a time consuming process. In addition, there remains the problem of some Army Reserve buys that are uneconomical unless packaged together with an active Army buy. This means that we sometimes wait for an appropriate window. Some items we need are no longer in production or there is no active Army requirement. Such items are being replaced with available items, but this has taken time.

Since fiscal year 1984, Congress has appropriated over $3.8 billion, $1.2 billion in 1988 alone, above levels requested by the Administration for the Guard and Reserve dedicated procurement account.

QUESTION. Could each of the Chief's please tell the Committee how these funds have been used and what effect this additional funding has had on the readiness of units under their control?

ANSWER. Since the Army National Guard has been receiving dedicated procurement funds readiness has improved dramatically. From 1985 to present, the portion of ARNG units now deployable for Equipment on Hand has risen from 52.8% to 77.2%. This includes units undergoing modernization and reporting unready for equipment on hand. This improvement is due to a combination of Dedicated Procurement funds, management of our assets, and delivery of equipment through Army distribution. Examples of readiness-producing equipment procured with Dedicated Procurement funds are: 1099 M923 5-Ton Trucks, 833 M113 Armored Personnel Carriers, 2223 CUCVs, 580 M901 ITV conversion kits, 162 M198 Howitzers, 14 different types of signal equipment, 4889 night vision devices, 4624 small unit transceivers AN/PRC 126, and 325 electronic shop shelters.

QUESTION. The Reserve components have always had a lot of control over the funds in the dedicated procurement account. We have been told in previous hearings that the Chiefs can identify shortfalls and quickly obligate funds in the dedicated account. Given the degree of control that rests with the Guard and Reserve, why does it appear that these dedicated funds are being obligated at a slower rate than active procurement accounts?

ANSWER. The Army National Guard is able to identify shortfalls in readiness-producing equipment quickly, and has in many instances been able to acquire equipment rapidly. Examples include 3096 AN/VRC radio sets which were ready for delivery in less than a year, and 96 M113A2 Armored Personnel Carriers which were delivered in six months. Situations have occurred, however, where funds were not obligated as fast as Active Component accounts. This can happen when an Army contract for an item has expired and the Army is not procuring any additional equipment, but the Army National Guard is still short. The new equipment contracts must be negotiated for the Dedicated

Procurement acquisition. This process can often take up to a year to resolve.

GUARD AND RESERVE

QUESTION: Since fiscal year 1984, Congress has appropriated over $3.8 billion, $1.2 billion in 1988 alone, above levels requested by the Administration for the Guard and Reserve dedicated procurement account.

-- Could each of the Chiefs please tell the Committee how these funds have been used and what effect this additional funding has had on the readiness of units under their control?

ANSWER: Unit readiness comprises many interdependent elements, only one of which is equipment. The Naval Reserve does not attempt to measure the increase in readiness attributable to one factor, since it could give a misleading picture when viewed independently and be very misleading as to the effect on overall readiness. However, the funding provided by Congress in the National Guard and Reserve Equipment (NG&RE) appropriation has helped to improve the Naval Reserve's capabilities and interoperability with the active fleet. To mention a few examples: FY 1986 funds allowed the upgrading of Reserve P-3C aircraft; FY 1986 and FY 1987 funds facilitated procurement of the first squadron of HH-60H CSAR helicopters, and FY 1987 funds completed the outfitting of three Naval Reserve construction battalions. Assuming we are authorized to spend the FY 1988 funds, we will add six P-3C aircraft, enhance the capabilities of nearly half of our older MIUW vans with the addition of the AN/SQR-17A, and replace four of our limited capability DC-9s with newer and upgraded C-9B configured aircraft.

QUESTION: The Reserve components have always had a lot of control over the funds in the dedicated procurement account. We have been told in previous hearings that the Chiefs can identify shortfalls and quickly obligate funds in the dedicated account. Given the degree of control that rests with the Guard and Reserve, why does it appear that these dedicated funds are being obligated at a slower rate than the active procurement accounts?

ANSWER: Before procurement of equipment is proposed in a budget request, it must pass through a rigorous, well-defined process. Consequently, the organization and specifications exist to ensure procurement is initiated in a timely manner, once funding is available. Since the National Guard and Reserve Equipment appropriation buys equipment that has not been budgeted, minimum preliminary actions must be completed before procurement begins to ensure that public funds are used wisely. Where an existing contract exists, e.g., Seabee equipment, the time frames for procurement are very similar. Additionally, since the regular procurement appropriations are in existence, procurement action can start when the first Continuing Resolution is passed, whereas the National Guard and Reserve Equipment appropriation is not available for use until after the appropriation is passed.

HOW EXTRA PROCUREMENT FUNDS WERE USED

Question: Since Fiscal Year 1984, Congress has appropriated over

$3.8 billion, $1.2 billion in 1988 alone, above levels requested by the Administration for the Guard and Reserve dedicated procurement account.

---- Could each of the Chiefs please tell the Committee how these funds have been used and what effect this additional funding has had on the readiness of units under their control.

Answer: Overall, the Marine Corps ground equipment goals for the Reserve are being met. While these assets do not yet fully satisfy total Reserve requirements, current programs (if funded), will eliminate all but a very small percentage of these equipment shortages by the end of Fiscal Year 1990. Special Congressional Funding has contributed significantly towards the modernization of our ground Reserve forces and the stand-up of the C-130 squadron at Stewart Airport. Readiness of Selected Marine Corps Reserve units in terms of improved capability and interoperability with the Active component has increased proportionately.

PROCUREMENT ACCOUNT OBLIGATION RATE

Question: Since Fiscal Year 1984, Congress has appropriated over $3.8 billion, $1.2 billion in 1988 alone, above levels requested by the Administration for the Guard and Reserve dedicated procurement account.

---- The Reserve Components have always had a lot of control over the funds in the dedicated procurement account. We have been told in previous hearings that the Chiefs can identify shortfalls and quickly obligate funds in the dedicated account. Given the degree of control that rests with the Guard and Reserve, why does it appear that these dedicated funds are being obligated at a slower rate than active procurement accounts?

Answer: Special Congressional Funding has enabled us to procure and/or accelerate the acquisition of weapon systems vital to the modernization of our Reserve Component. The only area in which we have experienced a slow obligation rate of these funds is in the procurement of unique training items. This has been due mostly to the fact these simulators and devices are current state-of-the-art and are not "off the shelf" items. We anticipate the balance of these funds to be obligated by September 1988. Once received, we feel the quality of training for the Reserve will be enhanced immeasurably.

GUARD/RESERVE EQUIPMENT PROCUREMENT

QUESTION: Since Fiscal Year 1984, Congress has appropriated over $3.8 billion, $1.2 billion in 1988 alone, above levels requested by the Administration for the Guard and Reserve dedicated procurement account. Could each of the Chiefs please tell the Committee how these funds have been used and what effect this additional funding has had on the readiness of units under their control. The Reserve components have always had a lot of control over the funds in the dedicated procurement account. We have been told in previous hearings that the Chiefs can identify shortfalls and quickly obligate funds in the dedicated account. Given the degree of control that rests with the Guard and Reserve, why does it appear that these dedicated funds are being obligated at a slower rate than active procurement accounts?

GENERAL SCHEER: Since Fiscal Year 1984, $542.1 million has been appropriated to the Air Force Reserve procurement account. Of these funds, $450 million were specified for procurement of 24 C-130H aircraft, 8 each in 1986, 1987, and 1988. An additional $17.1 million of the funds appropriated in Fiscal Year 1988 were directed toward procurement of a C-5A simulator and four sets of improved weather reconnaissance equipment. The remaining $75 million was appropriated for discretionary use by the Chief of Air Force Reserve for procurement of miscellaneous equipment.

The miscellaneous equipment procurement funds appropriated in Fiscal Year 1985 were used to procure electronic countermeasure (ECM) and infrared countermeasure (IRCM) equipment for the Reserve AC-130A gunships, machine guns and other weapons as well as MILES weapons simulators for security police units, radios, aircraft battle damage repair tools and equipment, special-purpose and general-purpose vehicles, and equipment for maintenance of C-5A aircraft at Kelly Air Force Base. The Fiscal Year 1986 funds are being used for procurement of air combat maneuvering instrumentation (ACMI) pods for fighter units, night vision devices for special operations forces and security police units, special-purpose vehicles, tactical and non-tactical radios, flare/chaff dispensers for AC-130A gunships, aircraft maintenance support equipment, and other ground support equipment. We intend to use Fiscal Year 1988 miscellaneous equipment funds to procure ECM pods and some needed vehicles and support equipment.

There has not been a problem obligating funds for procurement of aircraft. There have been problems in timely obligation of miscellaneous funds for numerous reasons. First, since the funds were not included in the Administration's request, no preliminary actions could be taken until the funds have been appropriated and released. Those funds that were appropriated but not authorized have been held until supplemental authorization could be obtained. Consequently, the funds have not been actually available for use until near the midpoint of the fiscal year.

In most cases, the Air Force Reserve does not directly contract for needed equipment. We work with Air Force Logistics Command item managers using the established acquisition infrastructure. Since Reserve procurement is generally combined with active duty contracts for like items, the rapidity with which funds can be obligated hinges on the date of the Reserve request in relation to the contracting action. If options are available which can be exercised, the funds can be obligated much faster than if new contracts must be written. In that case, all the normal acquisition requirements must be followed, which results in delays in obligation of the funds.

However, despite some delays in obligation because of the administrative and legal requirements, as a result of these special appropriations, the Air Force Reserve has been able to procure equipment that would otherwise not have been available. The normal programming process would not have provided the modifications to our gunships, the weapons and radios, the improved training brought about by ACMI and MILES, or the other equipment items that are significantly improving our combat capability. Therefore I believe that despite an appearance of low obligation rates, the funds that have been appropriated have been a very important factor in improving the overall combat capability and readiness of the Air Force Reserve.

QUESTION: Since fiscal year 1984, Congress has appropriated over $3.8 billion, $1.2 billion in 1988 alone, above levels requested by the Administration for the Guard and Reserve dedicated procurement account. Could each of the Chiefs please tell the Committee how these funds have been used and what effect this additional funding has had on the readiness of units under their control. The Reserve components have always had a lot of control over the funds in the dedicated procurement account. We have been told in previous hearings that the Chiefs can identify shortfalls and quickly obligate funds in the dedicated account. Given the degree of control that rests with the Guard and Reserve, why does it appear that these dedicated funds are being obligated at a slower rate than active procurement accounts?

GENERAL CONAWAY: As you know, the Air National Guard has an outstanding obligation rate on procurement with the Guard and Reserve Equipment account funds. However, there are a number of reasons obligation rates seem slow for some equipment items. Access to funds is delayed in many instances by the authorization/appropriation process. For instance, of the $341 million appropriated for the Air National Guard in FY 1988, only $258 million has been authorized. Of the $341 million, $311 million is for line-item directed aircraft procurement, a complex process the active Air Force and the ANG work together. Compounding this process is the fact that the procurement was unbudgeted. Budgeted procurement has already gone through much of the preparatory planning and programming actions whereas these Congressionally added items are not programmed into the system until after final approval by the Congress. Miscellaneous equipment procurement must also be processed through normal procurement channels. In addition, we must provide the Congress with a list of proposed items to be procured with the miscellaneous funds and receive Congressional approval before taking any procurement actions.

For FY 1988, the Continuing Resolution was not adopted by the Congress until late December 1987. This is the initial time the Chiefs know exactly what is being funded by the Congress. The Reserve Component Chiefs then must provide a report to the Congress, within 120 days of enactment, denoting what items of equipment will be procured with the dollars provided. Allowing 30 days for Congressional approval of the procurement plan brings us to May 1988 before the funds transfer can begin. The contracting process that takes a number of months to complete cannot begin until funds are received. For example, the Operational Support Aircraft you funded in FY 1986 were not pushed through source selection and contract award until March 18, 1988.

The approximately $700 million provided for the Air National Guard in this account since 1983 chips away at a mountainous equipment requirement that lingers in the billions of dollars. We are making a significant inroad on the most pressing combat-essential and high priority shortfall items, such as communications gear. Troposcatter radios and digital equipment essential to compatability are beginning to replace 1950's tube technology. Support equipment and spares for tactical fighter, airlift, and tanker units is beginning to flow. Battle damage repair kits and combat survivability items are being fielded across the Air Guard. Electronic countermeasure, chaff and flare upgrades are being installed on our combat aircraft. Of course there is a very long way to go toward the goal of modernizing our Guard units, established by Senator Stennis and this distinguished committee in FY 1983. We need your continued support and trust.

ANG procurement activity is reported quarterly to the Department of Defense. Each year, after Congress approves the Guard and Reserve Equipment Appropriation mark-up, we comply with the law requiring a report be submitted to the House and Senate Armed Services and Appropriation Committee chairmen detailing the equipment we intend to procure with miscellaneous funds. The following equipment items have been, or are being, procured with funds from the Guard and Reserve Equipment Account between FY 1983 and FY 1988, inclusive.

Communications Equipment
Missile Support Equipment
F-4 Support Equipment
Aircraft Fuel Tank
Missile Rail Modifications
Mission Support aircraft
Security Police Weapons
Weapons Loading Equipment
C-130H aircraft

ACMI System
Troposcatter Radios
Ground-based ILS
Fighter Night Vision Goggles
Field Trailer Kitchens
Fighter Video Recorders
A-7 LANA equipment
SB3614 Switchboard Upgrade
MH-60G Helicopters
EC-130 Radio Equipment
F-16 Chaff/Flare Dispensers
Mobile Tacans
Tactical Switchboards

A-10 ILS Retrofit
F-4 modifications
Weather Radar
ADP Equipment
MILES
F-15 "Eagle Eye" scopes
Aircraft Support Equipment
Medical Equipment
Global Decision Support System
ACMI Spares & Support Equipment
C-5 Learning Center
TSQ 111 Technical Controls
AIM 9L kits and adapters
Battle Damage Repair Tool Kits
Spectrum Analyzers
Telephone Switches
F-16 Radar Altimeter Antenna
C-130 Support Equip and Spares
Propeller Balancing Kits
F-16 Support Equipment
TF-34 Engine Diagnostic Equip
J-85 Jet Engine Maintenance Equip

EQUIPMENT

QUESTION. Money is going to be scarce this year. General Temple, if this Committee can find extra funds for the National Guard, would you rather have funding for equipment, manpower or operation and maintenance?

ANSWER. We certainly appreciate the support of this Committee and the optimism in the question. Within the Air National Guard, the most immediate funding shortfall is in their Military Personnel Appropriation. Like all other reserve components, the ANG absorbed the cost of their educational benefits program, the Montgomery G.I. Bill, for FY 89. The ANG absorbed this $12.9 million program at the expense of essential school training requirements - a 15 percent reduction in the program. While the school training program is executable, it is not without impact on the morale and trained readiness of the ANG, and any additional resources we can apply toward the program are certainly appreciated.

In the Army National Guard, extra funds would be used to first bring Special Training up to the FY 87 level, a shortfall caused by the FICA tax levied on Inactive Duty Training in PL 100-202. Additional funds beyond that would be used to support readiness and training by adding Full-Time Support personnel. We continue to have a shortfall in manning ARNG units with full-time personnel who provide day-to-day support for training, maintenance, etc.

Question: Money is going to be scarce this year. General Temple, if this Committee can find extra funds for the National Guard, would you rather have funding for equipment, manpower or operation and maintenance? Would the other service chiefs like to comment?

Major General Ward: I would rather have funding for some of the full-time support positions that we were forced to eliminate from the Amended Budget request due to budget constraints. Given the constrained fiscal environment, I would limit this increase to 300 AGR spaces and $7 million in the RPA request and to 100 military technicians and 100 other civilians, $5 million, in the OMAR request. I also would restore about one-fourth, or $25 million, of the reduction to training funds in RPA. Finally, I would put $5 million into fielding and sustaining equipment bought with previous years' dedicated procurement funding and any remaining funding into procuring additional new equipment for deployable and training base units.

GUARD AND RESERVE

QUESTION: Money is going to be scarce this year. General Temple, if this committee can find extra funds for the National Guard, would you rather have funding for equipment, manpower or operation and maintenance? Would the other service chiefs like to comment?

ANSWER: Additional Full-Time Support end strength is the most urgent need for the Naval Reserve.

WHERE WOULD ADDITIONAL FUNDS BE SPENT

Question: Money is going to be scarce this year. General Temple, if this Committee can find extra funds for the National Guard, would you rather have funding for equipment, manpower or operation and maintenance? Would the other service chiefs like to comment?

Answer: One of the Marine Corps Reserve's top priorities is continued modernization in the 4th Marine Division, 4th Marine Aircraft Wing, 4th Force Service Support Group to ensure commonality of equipment/interoperability of Active and Reserve Forces. If additional funding were made available, the Marine Corps Reserve would procure AH-1W attack helicopters, AV-8B aircraft and F-16N aircraft for the 4th MAW. Another high priority is funding for additional Full-Time Support personnel to improve our ability to manage and administer the Marine Corps Reserve program, support the modernization effort, and support scheduled unit activations.

GUARD FUNDING PRIORITIES

QUESTION: Money is going to be scarce this year. General Temple, if this Committee can find extra funds for the National Guard, would you rather have funding for equipment, manpower or operation and maintenance? Would the other service chiefs like to comment?

GENERAL SCHEER: It is important to maintain a balanced program with adequate funding in all areas of manpower, O&M, and equipment modernization. We have to be able to pay for the manpower we have and the increases needed for our force structure improvements. Then we must be able to adequately train the force and maintain our aircraft, equipment, vehicles, and facilities, which requires adequate O&M funding. If the funds submitted in our budget are approved, they will provide adequate levels of manpower, training, and support. The area in which improvements were not programmed or budgeted is in equipment procurement. Therefore, if our budget request is fully funded, additional funding would be most beneficial in the equipment area.

EQUIPMENT

The 1987 Report of the Reserve Forces Policy Board states, "Equipment shortages adversely affect training and mobilization readiness ... Department of Defense Reserve component equipment shortages is approximately $14.7 billion."

QUESTION: Secretary Duncan, procurement for the Reserves is down 8% in 1989. How are we going to get Guard and Reserve units capable of wartime missions if procurement is being reduced? Since they have a lot of catching up to do, shouldn't Guard and Reserve procurement budgets be protected?

ANSWER: In order to comply with the budget agreements reached in November on funding for the Department of Defense, substantial reductions were required in many areas. The amended FY 1989 DoD budget does not fully provide for all needs of either the Active or Reserve forces. While the Department does not build programs on a component basis, the application of Total Force policies can be seen to have provided a relative degree of protection to the Reserve components' procurement in this instance. Overall, the procurement accounts of the Services are down over $14 billion (16%). This compares to a $182 million (7%) reduction in the Reserve components which represents only 1.3% of overall procurement reductions. Where resources are inadequate to meet all needs, the Department believes resource allocations must be based upon Total Force considerations, not componency, to ensure that combat capability is maximized.

Operation and Maintenance Budgets

QUESTION: Secretary Duncan, unlike the active forces, the operations and maintenance budgets of the Reserve and Guard components didn't fare well in the 1989 budget. For example, the active Air Force's operation and maintenance budget increases by over $2 billion in 1989, while the Air National Guard and Air Reserve combined increases by only $35 million, not even enough to cover inflation. Why didn't the Guard and Reserve get operations and maintenance increases commensurate with the active forces? What are the impacts on training , operating tempo, and depot maintenance of these reduced operations and maintenance budgets?

ANSWER: From the responses to your questions submitted by the Reserve Component Chiefs, we see that those components took their operations and maintenance reductions commensurate with the Total Force reduction requirements. Naturally, these reductions have an adverse affect on training and readiness, but the Services were required to reduce the total budget unilaterally by $33B and made the tough decisions that were necessary. We think that all the parties involved in the process were heard, and that tough and reasonable decisions were made to maintain, insofar as possible, DoD priority on readiness and sustainability even at the expense of force structure.

Question: Why didn't the Guard and Reserve get operation and maintenance increases commensurate with the active forces?

Question: What are the impacts on training, operating tempos and depot maintenance of these reduced operation and maintenance budgets?

Would any of the Guard and Reserve Chiefs like to comment on this issue?

Major General Ward: I would like to comment on the second question. The Army Reserve initial budget request for O&M in FY89 was $958.2 million. Reduced funding has several impacts on the Army Reserve. All essential training will be accomplished, however it will be at a reduced rate.

Another serious impact results from the reduction in military technicians and other civilians. This will reduce our ability to fully support planned force structure activations and conversions and will also affect the maintainability of some of the new equipment coming into the Reserves.

Supplies and Equipment funding has been drastically reduced. This will also reduce our ability to support force structure changes. It will also significantly increase our backlog of organizational clothing and equipment.

There will also be a $10 million increase in the Army Reserve's backlog of maintenance and repair (BMAR).

Secretary Duncan, unlike the active forces, the operation and maintenance budgets of the Reserve and Guard components didn't fare well in the 1989 budget. For example, the active Air Force's operation and maintenance budget increases by over $2 billion in 1989, while the Air National Guard and Air Force Reserve combined increase by only $35 million, not even enough to cover inflation.

QUESTION. Why didn't the Guard and Reserve get operation and maintenance increases commensurate with the active forces?

ANSWER. The Army National Guard's initial budget request for Operations and Maintenance in FY 89 was $2.055 million. During the Army budget prioritization process, the ARNG funding requirement was set at the present $1,797 million level.

QUESTION. What are the impacts on training, operating tempos and depot maintenance of these reduced operation and maintenance budgets?

ANSWER. The air operating tempo was reduced. For FY 89 the ground operating tempo for armored vehicles has been funded at 225 miles, against a planning standard of 36% (or 306 miles) of the Active Army operating tempo of 850 miles. Because of this level of ground OPTEMPO, a marginal overall C3 level of readiness is expected. Training will continue to be accomplished but at a reduced level. The reduced budget did not affect depot maintenance.

GUARD AND RESERVE

QUESTION: What are the impacts on training, operating tempos and depot maintenance of these reduced operation and maintenance budgets?

ANSWER: The FY 1989 amended Operation and Maintenance, Navy Reserve Budget request actually reflects a greater percentage program growth over the FY 1988 appropriated level than does the active force's Operation and Maintenance, Navy request. The reflected program growth for the Naval Reserve is mainly in support of full year operation and maintenance for additional frigates transferred to the Naval Reserve in FY 1988 and the return of Reserve ships funded during a part of FY 1988 by the Operation and Maintenance, Navy appropriation while supporting the active forces in the Middle East.

The FY 1988/89 President's Budget requested $1,036.8 million for FY 1989; the current request is for $979.2 million. Adjustments to the FY 1989 program between the FY 1988 President's Budget and the FY 1989 Amended Budget were primarily because of the extension of FY 1988 Congressional adjustments, and also because of downward adjustment of the Department's pricing assumptions.

Programmatic reductions in Base Operations support will impact our personnel support and Morale, Welfare and Recreation (MWR) activities with resulting degradation of the amount and quality of these services. Lower ship maintenance funding may be accommodated by reducing the level of ship spare parts, outfitting and intermediate support, which can be expected to result in increased equipment down-time and reduced ship material condition. Where necessary, the scope of aircraft and ship depot maintenance will scaled back or entire maintenance availabilities deferred. This is expected to result in deteriorated ship and squadron readiness. The reduced level of travel, which is 9% below the FY 1987 level, will severely limit the opportunities for our Full-Time Support Personnel to visit and train Selected Reservists and will disrupt the effectiveness of important surface training program initiatives.

IMPACT OF REDUCED O&M BUDGETS

Question: Secretary Duncan, unlike the active forces, the operation and maintenance budgets of the Reserve and Guard components didn't fare well in the 1989 budget. For example, the active Air Force's operation and maintenance budget increases by over $2 billion in 1989, while the Air National Guard and Air Force

Reserve combined increase by only $35 million, not even enough to cover inflation.

- Why didn't the Guard and Reserve get operation and maintenance increases commensurate with the active forces?

- What are the the impacts on training, operating tempos and depot maintenance of these reduced operation and maintenance budgets?

Would any of the Guard and Reserve Chiefs like to comment on this issue?

Answer: The Marine Corps Reserve O&MMCR Appropriation was developed during the Fiscal Year 1989 POM/Budget formulation process which involved a series of decisions concerning the status and direction of the Total Force. The process insured the Marine Corps Reserve could maintain current capability (Operational Training) and resulted in an Operations and Maintenance Marine Corps Reserve Budget which reflects a fair allocation of resources and is in line with Total Force requirements.

GUARD/RESERVE OPERATION AND MAINTENANCE BUDGETS

QUESTION: Secretary Duncan, unlike the active forces, the operation and maintenance budgets of the Reserve and Guard components didn't fare well in the 1989 budget. For example, the active Air Force's operation and maintenance budget increases by over $2 billion in 1989, while the Air National Guard and Air Reserve combined increases by only $35 million, not even enough to cover inflation. Why didn't the Guard and Reserve get operation and maintenance increases commensurate with the active forces?

ANSWER: The Operation and Maintenance, Air Force Reserve budget request increases a net of $27.5 million from FY 1988 to FY 1989. Funds increase $29.2 million to cover the estimated cost of inflation while financing for approved FY 1989 program adjustments is actually reduced by $1.7 million. Various changes that cause this negative growth are: conversion of older F-4D and C-130A aircraft to more modern, less costly F-16s, F-4Es and C-130Hs, a reduction of six F-4s, four C-130Bs, one SOF AC-130A and two ARRS HC-130/H-3 aircraft from the primary inventory, and decreased depot maintenance requirements due to acquiring newer weapon systems and losing those aircraft addressed earlier. These program reductions are partially offset by FY 1989 increases, primarily for additional C-5 unit equipped aircraft. Although the Air Force Reserve does not reflect an FY 1989 increase that is commensurate with the active Air Force, the estimate does include funding for price growth and execution of those programs approved for the fiscal year.

IMPACTS OF REDUCED GUARD/RESERVE O&M BUDGETS

QUESTION: What are the impacts on training, operating tempos and depot maintenance of these reduced operation and maintenance budgets? Would any of the Guard and Reserve Chiefs like to comment on this issue?

GENERAL SCHEER: The FY 1989 budget request for the Operation and Maintenance, Air Force Reserve appropriation fully supports the required mission training, operating tempo, and aircraft maintenance and modifications necessary to attain and maintain the desired readiness capability for our proposed force structure.

GUARD/RESERVE OPERATION AND MAINTENANCE BUDGETS

QUESTION: Secretary Duncan, unlike the active forces, the operation and maintenance budgets of the Reserve and Guard components didn't fare well in the 1989 budget. For example, the active Air Force's operation and maintenance budget increases by over $2 billion in 1989, while the Air National Guard and Air Force Reserve combined increase by only $35 million, not even enough to cover inflation. Why didn't the Guard and Reserve get operation and maintenance increases commensurate with the active forces?

GENERAL CONAWAY: The apparent growth in active Air Force's O&M is misleading. The results of FY 1988 congressional actions drove the FY 1988 baseline to an extremely low level. In fact, from FY 1987 to FY 1988, the active Air Force realized a negative 10.5 percent real growth. The FY 1989 active component budget submittal, reflecting real growth of 6.7 percent over FY 1988, still results in cumulative real growth of negative 3.7 percent over FY 1987. The Air National Guard, on the other hand, realized zero real growth in FY 1988. The FY 1989 ANG budget submittal, reflecting negative 2.7 percent real growth, results in cumulative real growth of negative 2.7 percent over FY 1987. This reflects the ANG's fair share of the total Air Force O&M budget reductions.

GUARD AND RESERVE

QUESTION: Admiral Smith, the 1989 budget proposes decommissioning 16 Navy frigates. As I'm sure you are aware, there has been considerable discussion about putting these ships instead in the Naval Reserve. How difficult would it be for the Navy Reserve to man these ships?

ANSWER: We can provide Selected Reservists to man the approximately 37% of wartime allowance of these ships which would need to be designated for Selected Reserve manning. However, to do so we will be required to draw significant percentages of these personnel from inland locations, which are hundreds or thousands of miles from ship homeports. This will require greatly increased transportation costs and will be arduous for many Reservists who will have to fly long distances to and from the ships and be underway for their drills. We estimate that many Reservists assigned to these ships from inland areas will terminate their Reserve participation unless significant incentives are offered for such arduous weekend travel and drilling assignment. We therefore expect considerable difficulty in fully manning these ships.

QUESTION: How much end strength and Full-Time Support would they require?

ANSWER: If the Navy were to retain six FFG-1 and ten FF-1040 class frigates in the Naval Reserve, total end strength requirements would be as follows:

Active Duty Officer: 181
Active Duty Enlisted: 3190
Selected Reserve Officer: 107
Selected Reserve Enlisted: 1874

Because of TAR end strength "cap", inability to access and train TARs in the limited time available and uncertain longevity of these ships if assigned to the Naval Reserve Force, we would plan on using USN personnel instead of TAR personnel for Full-Time Support.

AIR NATIONAL GUARD AND RESERVE FORCE STRUCTURE

QUESTION: Generals Conaway and Scheer, the 1989 budget proposes to reduce 12 Guard and Reserve Tactical Fighter Squadrons from 24 to 18 aircraft by the end of FY 1991. 1989 savings are $5 million. Could you explain this proposal, and which units would be reduced? What are the forecasted budget and manpower savings in 1990?

GENERAL SCHEER: The 1989 budget proposes to reduce the 507 Tactical Fighter Group at Tinker AFB, Oklahoma by six aircraft when the unit converts from F-4 to F-16 aircraft. Possible further reductions in Air Force Reserve fighter force structure beyond FY 89 have not yet been reviewed by the Secretary of Defense.

QUESTION: Generals Conaway and Scheer, the 1989 budget proposes to reduce 12 Guard and Reserve Tactical Fighter Squadrons from 24 to 18 aircraft by the end of FY 1991. 1989 savings are $5 million. Could you explain this proposal, and which units would be reduced? What are the forecasted budget and manpower savings in 1990?

GENERAL CONAWAY: The FY 1989 budget reflects the initial portion of an Air Force plan to draw down three tactical fighter wings. Two of these wings will come from the active Air Force and one wing equivalent will come from the reserve components. The impact on the ANG during FY 1989 is the downsizing of the A-7 unit at Selfridge, Michigan from 24 Primary Aircraft Authorized (PAA) to 18 PAA, and the conversion of the Hancock Field, Syracuse, New York unit from a 24 PAA A-10 unit to an 18 PAA F-16 unit. The dollar and manpower impacts in FY 1989 are:

	Selfridge ANGB, MI	Hancock Fld, NY
Manpower		
Technician	-22	-40
AGR	-6	-10
Drill	-143	-11
Dollar Savings (In millions)	-$2.944	-$2.335

The annual savings to the Department of Defense for these two actions approximates $3.3 million for Selfridge, Michigan, and $6.0 million for Hancock Field, New York.

GUARD/RESERVE VS ACTIVE FORCE STRUCTURE CHANGES

QUESTION: Couldn't we save combat capability and save a lot more in the budget by applying this cost saving measure to the Active Air Force instead of the Guard and Reserve?

GENERAL SCHEER: If, for example, the six F-16 aircraft scheduled to be lost at Tinker AFB, Oklahoma were restored, and six additional F-16s were taken from the active duty, there would be no loss or gain in overall wartime capability. The wartime capability of the F-16 is the same whether the aircraft is in the active duty or the Air Force Reserve. Such an action would save more money because it costs less in peacetime to operate an F-16 in the Air Force Reserve than it does to that aircraft in the active duty. However, the Air Force has to use more than just cost to determine force mix of active and Guard/Reserve. Other factors include overseas basing, conus-overseas rotation factors, and contingency response.

QUESTION: Couldn't we save combat capability and save a lot more in the budget by applying this cost saving measure to the Active Air Force instead of the Guard and Reserve?

GENERAL CONAWAY: We could save combat capability by shifting aircraft from an active drawdown into the Guard, thereby retaining this essential combat capability at a reduced cost. However, the Air Force has to use more than just cost to determine force mix of combat aircraft.

USE OF GUARD AND RESERVE OVERSEAS

QUESTION: This Committee fully supports the total force concept and overseas use of Guard and Reserve units. The Guard and Reserve owe this Committee a report on May 1, that details missions overseas that could be taken over by reserve components. This Committee has recommended specifically that the Air Force convert the European Distribution System (18 C-23 Sherpa aircraft designed to provide logistics support in wartime) to a Guard/Reserve mission. Generals Conaway and Scheer, has the Air Force tasked the Guard/Reserve to study taking on the European Distribution System mission? What do you think the personnel requirements would be to take the mission if most of the aircraft were stationed in the U.S. instead of Europe during peacetime? Don't you already have a lot of Guard and Reserve pilots who fly these Short Brothers aircraft for the commercial airlines?

GENERAL SCHEER: The Air Force Reserve has studied taking on the European Distribution System (EDS) mission and has made its input to the Air Force. The EDS is not a good mission for the Air Force Reserve. The EDS is an integrated system involving more than just the aircraft. The system has to be exercised continually to ensure that it can fulfill its mission which is to ensure logistic support capability at the onset of a European conflict. If a portion of the EDS aircraft were stationed in the U.S. during peacetime, the number of Reserve personnel required to man the mission would depend on the number of aircraft withdrawn from Europe. Such an action would hurt the day-to-day readiness of the combat aircraft stationed in Europe. Additionally, the limited range of the C-23 makes it difficult to redeploy them to Europe in a short amount of time at the outbreak of hostilities. For these reasons, it is essential all of the EDS aircraft remain in Europe. With the aircraft in Europe it would not be feasible to send Reservists over there for training. Additional aircraft would have to be procured and additional flying hours programmed to train the Reservists. The only feasible way the Air Force Reserve could take over the mission would be by sending full-time personnel permanently (PCS) to Europe to operate the mission. This would result in no cost savings over the present, active force mission. For these reasons, assumption of the EDS mission by the Air Force Reserve is not appropriate or cost effective. The Air Force Reserve personnel database lists five Reservists qualified in the Shorts 330 aircraft.

QUESTION: This Committee fully supports the total force concept and overseas use of Guard and Reserve units. The Guard and Reserve owe this Committee a report on May 1 that details missions overseas that could be taken over by reserve components. This Committee has recommended specifically that the Air Force convert the European Distribution System (18 C-23 Sherpa aircraft designed to provide logistics support in wartime) to a Guard/Reserve mission. Generals Conaway and Scheer, has the Air Force tasked the Guard/Reserve to study taking on the European Distribution System mission? What do you think the personnel requirements would be to take the mission if most of the aircraft were stationed in the U.S. instead of Europe during peacetime? Don't you already have a lot of Guard and Reserve pilots who fly these Short Brothers aircraft for the commercial airlines?

GENERAL CONAWAY: The Air Force, in conjunction with the Air National Guard and the Air Force Reserve, has studied the European Distribution System mission. Basing aircraft in the CONUS would still create additional personnel requirements due to European theater familiarization requirements and taskings. The theater requires constant peacetime operation to keep the command and control and logistical system operating. This would require a constant rotation of personnel thereby significantly raising manpower and TDY costs above existing levels. The Air National Guard has two pilots who fly C-23/Short Brothers aircraft for commercial carriers.

ARMY RESERVE

QUESTION: What additional missions can be assigned to the Army Reserve?

ANSWER: Under the present Overseas Deployment Training (ODT) program we are conducting all missions that can be accomplished by the United States Army Reserve. With additional funding these programs can be expanded. The present concept of ODT allows units to be rotated into Europe and other theaters to train/support in accordance with CAPSTONE mission alignment. The program is planned for five years and generally executed in three year rotations. Rotations allow one year for Army Training and Evaluation Programs (ARTEP), a second year for exercises in the Continental United States (CONUS), and the final year for ODT. This cycle helps maintain unit proficiency by providing readiness insight to commanders through ARTEP and exercises. Commanders can then identify unit weaknesses and provide fixes prior to ODT. Missions for ODT incorporate a wide range of units including Military Police, Transportation, Maintenance, and Postal Services. An expansion of ODT requested by Commander In Chief, Europe (CINCEUR) is being developed. The expansion, detailed in the response due you no later than 1 May 88 from Assistant Secretary Defense, Reserve Affairs, will allow for year round support by heavy and light equipment maintenance companies (HEMCO/LEMCO) to Europe. These units will fall within the policy of the three year rotational cycle to allow unit commanders to correct and train up on their deficiencies prior to deployment overseas. ODT for obvious reasons is more expensive than Continental United States Army (CONUS) based annual training. Therefore, RC unit support to Europe would require additional funds given unit availability under the current rotational policy.

Presently, some units already programmed for ODT are being deleted from the five year plan due to funding decrements. To allow for maximization of the fiscal year 88 ODT plan a plus-up of $17 million is needed. This amount includes three reserve component (RC) HEMCO/LEMCO units already on the plan exclusive of exercises such as REFORGER. For fiscal year 89 the same budget shortfalls exists. The fiscal year 89 ODT plan only provides for four reserve component HEMCO/LEMCO units therefore, the additional rotations (assumed to be as many as 18 more reserve component HEMCO/LEMCOs) would cost another $9 million over existing ODT shortfalls. The current ODT program has been carefully prioritized given other vital training objectives to the United States Army Reserve (USAR). There are no funds that can be reprogrammed to ODT in this constrained environment. The new initiative can only be accomplished with additional funding in concert with the three year rotational cycle.

USE OF GUARD AND RESERVES OVERSEAS

QUESTION. Could the other Guard and Reserve Chiefs provide some examples of missions that could be assumed by the Guard?

ANSWER. In compliance with an FY 88 Senate request to provide a report on specific missions overseas that could be assumed by Guard and Reserve units, the Army National Guard has participated in a joint study to determine the feasibility of such missions. The study has focused on using CS/CSS units on a rotational basis with a minimum of full-time Active Guard/Reserve (AGR) support. Currently the study is being staffed and is due to the Congress on the first of May 1988.

GUARD AND RESERVE

QUESTION: This Committee fully supports the total force concept and oversees the use of Guard and Reserve units. The Guard and Reserve owe this Committee a report by May 1, that details missions overseas that could be taken over by reserve components. This Committee has recommended specifically that the Air Force convert the European Distribution System (18 C-23 Sherpard aircraft designed to provide logistics support in wartime) to a Guard/Reserve mission. Could the other Guard and Reserve Chiefs provide some examples of missions that could be assumed by the Guard?

ANSWER: The Naval Reserve has no plans to assume any missions overseas.

MISSIONS RESERVES COULD TAKE OVER

Question: This Committee fully supports the Total Force concept and overseas use of Guard and Reserve units. The Guard and Reserve owe this Committee a report on May 1, that details missions overseas that could be taken over by Reserve Components. This Committee has recommended specifically that the Air Force convert the European Distribution System (18 C-23 Sherpa aircraft designed to provide logistics support in wartime) to a Guard/Reserve mission.

- Could the other Guard and Reserve Chiefs provide some examples of missions that could be assumed by the Guard?

Answer: Due to the nature of the Marine Corps missions overseas (extended expeditionary deployments to respond to world-wide contingencies and a MEF presence in Okinawa), it would not be practical for Marine Corps Reserve personnel to assume overseas active duty missions in peacetime. The constant turnover of units, transportation cost and lack of continuity would not be an effective use of our personnel. The Marine Corps Reserve is designed to enhance the Active Force in the event of mobilization.

A-7 STRIKEFIGHTER

QUESTION: General Conaway, last year the Congress added $10 million for aircraft procurement for advance work on the A-7 Strikefighter program. For what purpose will these funds be used?

GENERAL CONAWAY: A joint meeting of TAC, NGB, AFSC, AFLC, and LTV personnel resolved to fund the initial increment of non-recurring engineering costs for avionics and associated mission computer software changes.

QUESTION: I understand no procurement funds have been requested for the A-7 Strikefighter program in fiscal year 1989. Why were no funds requested and what is the impact on the program schedule?

GENERAL CONAWAY: The Air Force has not requested procurement funds in fiscal year 1989 because it has been determined to be more prudent to evaluate the A-7F after its initial flight tests to validate the expected performance and survivability gains prior to making a production decision. Pending a successful evaluation, and in light of fiscal realities, we will make a production decision and establish appropriate milestones.

QUESTION: Does the Air National Guard still support the A-7 Strikefighter program, and does it intend to seek procurement funds for this program in future budgets beginning in 1990?

GENERAL CONAWAY: The Air National Guard still supports the Air Force initiative which stated that pending successful test results, competitive alternatives and current fiscal realities, a production decision will be made. If the decision supports production of the Strikefighter, we will certainly support funding for procurement.

QUESTION: If the A-7 Strikefighter program is not funded, what is the impact on the Air Force's ability to conduct close air support in the 1990's?

GENERAL CONAWAY: If the total number of airframes available were the same, there would be no effect on the first day of the war. However, the survivability of a weapons system against the ground to air threat will be a consideration as the war goes on. Additionally, with the air threat, some air to air defensive capability must be available. The A-7 becomes tactically non-survivable in the mid-1990's. If the A-7 is not modernized, it must be retired.

A-16 -- CLOSE AIR SUPPORT

QUESTION: Have you considered the use of the F-16 derivative, the A-16, to conduct Close Air Support?

GENERAL CONAWAY: Yes. However, TAC's goal is to replace the A-7 with the A-7+ (A-7F) and replace the A-10 with the A-16. The Air Force is currently conducting an OSD directed study which investigates missionized aircraft (F-16 to A-16) as well as new designs that vary from austere to fully enhanced. The A-7F is part of this study.

A-7 VS F-16 OPERATIONAL CAPABILITY

QUESTION: If the A-7 Strikefighter meets its design specifications, will it be superior to an F-16 derivative in the Close Air Support role?

GENERAL CONAWAY: If air superiority were guaranteed, they would have comparable effectiveness in the air to ground mission. It should be noted that the configuration of both the A-7F and the A-16 is undefined at this time. The A-7F offers the potential to be a near term, cost effective solution to the 1990's battlefield.

GUARD AIRCRAFT FOR CLOSE AIR SUPPORT

QUESTION: Which would the Air National Guard choose to conduct close air support: the A-10, the A-7 Strikefighter or an F-16 derivative?

GENERAL CONAWAY: The Air Force, not the Air National Guard, decides which aircraft is best suited to perform a particular mission. The A-10, the A-7+ and the F-16 can all perform the close air support mission. The advantage of one aircraft over another is dependent on the threat environment, the battlefield, the location of the battle and the type of target.

GUARD AND RESERVE

QUESTION: Admiral, for several years the Navy has not requested P-3 aircraft for the Navy Reserve, but the Congress has been adding funds for this purpose. Can you tell us do you now have sufficient P-3 aircraft to meet your inventory requirements?

ANSWER: Yes, we presently have enough P-3A, P-3B and P-3C Update III model aircraft to meet the Primary Aircraft Allowance (PAA) for our thirteen squadrons. However, my concern is how and if the inventory will be maintained in the mid-90's as the P-3A and P-3B aircraft reach the end of their operational service life.

QUESTION: What are the benefits of adding funds to purchase additional P-3 aircraft in fiscal year 1989?

ANSWER: Although PAA is met, the addition of two more P-3Cs would allow the replacement of two older P-3 aircraft at the second Reserve P-3C squadron (VP-91) at NAS Moffett Field.

QUESTION: Where would additional P-3's be stationed if they were added to the Navy Reserve by the Congress?

ANSWER: We would place two in VP-91 at NAS Moffett Field, CA. If more were provided, it is our desire to transition a new site from the P-3A/B to the P-3C if the total number of aircraft onboard warrants.

QUESTION: What are the Navy Reserve's plans for the six aircraft that were funded in fiscal year 1988? Will a new squadron be formed, or will these planes replace older P-3A aircraft?

ANSWER: The six in FY 1988 gives us a total of 16 P-3C Update III aircraft. We will place nine in VP-62 at NAS Jacksonville, FL and seven in VP-91 NAS Moffett Field, CA. These are existing squadrons and we are replacing older P-3 aircraft.

QUESTION: What are the current force requirements for P-3 aircraft? How is this requirement being met? How many additional P-3 aircraft are required and why?

ANSWER: [Deleted].

Army National Guard/Army Reserve

Question: The Army Reserve's O&M budget drops from $857.5 million in 1988 to $794.9 million in 1989, a reduction of $62.6 million. Army National Guard O&M drops from $1,857 million in 1988 to $1,797 million in 1989, a drop of $60 million. Active Army O&M, however, increases by $954 million.

Why is there such a disparity in the budget request for the active Army versus the Guard/Reserve?

Major General Ward: Growth in the active Army O&M budget is more apparent than real, due to the absorbtion of over $1.5 billion in unprogramed requirements such as CHAMPUS and foreign currency fluctuations. All three O&M budgets were reviewed by the Army staff and reflect overall Army priorities in a highly restrictive fiscal environment. The Army Reserves' initial budget request for operations and maintenance in FY89 was $958.2 million. When the Army had to absorb $9 Billion additional reductions this literally required a complete re-prioritization of all requirements. Obviously some hard choices had to be made and we in the USAR would have liked more than $794.9M O&M funding. Nevertheless we are a total Army, each component receiving considerable support from the others. Internal Army philosophy was to return all non-investment appropriations to the FY87 level.

Question: The Army Reserve's O&M budget drops from $857.5 million in 1988 to $794.9 million in 1989, a reduction of $62.6 million. Army National Guard O&M drops from $1,857 million in 1988 to $1,797 million in 1989, a drop of $60 million. Active Army O&M, however, increases by $954 million.

How will these O&M reductions be absorbed? Will flying hours or OPTEMPO be reduced?

Major General Ward: The major areas in which the Army Reserve will absorb these O&M reductions are in personnel (397 military technicians, 157 other civilians), force structure actions, real property maintenance which will increase the backlog of maintenance and repair (BMAR), base operations support, supplies and equipment, and advertising and other support costs for the IRR screen.

OPERATION AND MAINTENANCE BUDGETS

The Army Reserve's O&M budget drops from $857.5 million in 1988 to $794.9 million in 1989, a reduction of $62.6 million. Army National Guard O&M drops from $1,857 million in 1988 to $1,797 million in 1989, a drop of $60 million. Active Army O&M, however increases by $954 million.

QUESTION. Why is there such a disparity in the budget request for the active Army versus the Guard/Reserve?

ANSWER. The Army National Guard's initial budget request for Operations and Maintenance in FY 89 was $2.055 million. During the Army budget prioritization process, the ARNG funding was set at the current funding level of $1,797 million.

QUESTION. How will these O&M reductions be absorbed? Will flying hours or OPTEMPO be reduced?

ANSWER. With the exception of military technicians, Operations and Maintenance reductions are being absorbed in all supported programs. Because of this flying hours and ground OPTEMPO are funded at a rate lower than required. For example, FY 89 ground OPTEMPO for armored vehicles has been funded at 225 miles. Required support is 36% (306 miles) of the Active Army OPTEMPO of 850 miles. Because of this funding a marginal overall C3 level of readiness is expected. Training will continue but at a reduced level.

POMCUS OF ROUNDOUT UNITS

QUESTION: Please explain the Army's decision to POMCUS roundout units (provide classified answer, if necessary).

ANSWER: There has been no HQDA decision to POMCUS Army Reserve units which roundout other Army units.

Question. General Ward, of all the Guard and Reserve components the Army Reserve has the lowest ratio of full-time to paid drill strength. Why is the Army Reserve lower? How do the Army Reserve combat units compare with Army National Guard Units in terms of full-time support?

General Ward. The chart below demonstrates the fact in the question:

FULL TIME SUPPORT PERSONNEL FY 1987

ACTUAL END STRENGTH

	ARMY		NAVAL	MARINE CORPS	AIR FORCE		DOD
	GUARD	RESERVE	RESERVE	RESERVE	GUARD	RESERVE	TOTAL
AC	771	1230	6945	5350	731	635	15662
AGR/TAR	25237	12414	21288	1742	7623	629	68933
CS	2565	4665	3041	343	2462	4867	17943
MT	25593	7276	0	0	23049	8722	64640
TOTAL FTS	54166	25585	31274	7435	33865	14853	167178
TOTAL SELRES	451858	313638	148096	42253	114595	80415	1150855
FTS/SELRES %	12.0	8.2	21.1	17.6	29.6	18.5	14.5

The full-time support level percentages of strength are partly a function of mission preparedness based on ship and aircraft systems in the Navy and Air Force, as compared to Army combat and support unit orientations. Therefore the Army understands that there should and will be differences among the Service Reserve Components.

We believe and previous Congresses have noted that a target level for the Army Reserve should be 14%. The Army has programmed to that level for the past several years, but competition for scarce resources has been intense, and we have been less successful than we would prefer. Although the Active Guard/Reserve and Military Technician Program have both been growing in the Army Reserve, the rate has been less than that required to attain the desired 14% level.

FULL TIME SUPPORT

QUESTION: How does the Office of the Secretary of Defense influence full-time manning levels between Guard and Reserve appropriate (the Air Force Guard has 29.6 percent full-time support while the Air Force Reserve has 18.9 percent full-time support)?

ANSWER: The Office of the Secretary of Defense monitors all requests from the Reserve Components for full-time support personnel. We review their programmed personnel strengths to ensure that they are reasonable in terms of structure, mission, and Selected Reserve manning. The services have the latitude of determining their own mix of employing these personnel.

The primary reason the Air National Guard has a higher proportion of full-time support personnel than does the Air Force Reserve, is that Air Guard units are independently located at civilian airfields and, as a result, must provide for themselves all of the services normally found at a military airfield including security, refueling, ground, and aircraft maintenance capability. The Air Force Reserve, by comparison, are principally located at active Air Force installations where active component base operations support resources are available for their use.

ARMY NATIONAL GUARD/ARMY RESERVE

QUESTION: General Ward, your statement points out that "In the years beyond FY 1989, difficult choices will have to be made between retaining existing structure and activating programmed structure in the face of constrained funding." Would you please elaborate on your statement? Are you aware of future force structure changes currently proposed in the latest five-year Defense plan revisions?

ANSWER: The effect of lost growth in the paid drill strength and AGR categories in the years beyond

FY 89 would be most significant and have wide-spread implications. The growth in USAR force structure supported by programmed end strength is an integral part of the Army's long term modernization program.

Growth in existing units results from reconfiguring them to new designs consistent with the active and Guard units they support on the battlefield, and from the integration of modernized systems. New units fill voids in our capabilities to provide coherent forces to support the warfighting CINCs under current doctrine and in the current threat environment. Wholesale cancellation of these actions would cause severe turbulence in the USAR. This turbulence would require several years from which to recover, potentially unhinge important parts of the total Army's warfighting capability, and probably result in significant costs.

We have opted for a prudent response to these reductions. We will proceed with execution of USAR force structure actions essentially as planned, and accept attendant modest increase in hollowness of some units for the immediate future. We will then work to reduce this hollowness over a period of several years through a combination of initiatives. Each year we find that some programmed structure cannot be executed as planned for a variety of reasons. We will manage our program even more intensely than in the past, identify these problem actions as early as possible, eliminate those that can not be executed, and redistribute resources. We will also review the force and focus on units that have long term readiness problems. Those that cannot be brought up to standards within available resource constraints will be considered for inactivation. Integral to that effort is the acknowledgement that the demographics of the United States are changing and some units will have to be relocated to attain/maintain acceptable strength levels based on the changing recruiting environment. Finally, if necessary, we will select units with the lowest priority for support of the warfighting CINCs as candidates for inactivation over the long term so that remaining resources can be applied to the most critical warfighting and support needs.

FORCE STRUCTURE CHANGES

QUESTION. General Burdick, how will the Army National Guard meet its commitments to roundout the 9th Infantry and 6th Infantry (Light) Divisions under the force structure changes in the 1989 budget? Without end strength growth, where will these Guard positions come from?.

ANSWER. The mission of roundout to the 9th Infantry Division will be assumed by current units of the Washington Army National Guard. There will be no strength difference in these units. A new battalion will be formed in Alaska to meet the 6th Infantry Division roundout requirement. Initially, most of the personnel will come from current units in Alaska. Additional resources for Alaska will be required beginning in FY 90 to fully man the unit.

ARMY RESERVE

QUESTION: For the record, please provide ground operating tempo (by major vehicle type) and flying hours per month (for each major aircraft type) for the Army National Guard and the Army Reserve since 1982. How do these OPTEMPO/flying hour rates compare for roundout and non-roundout units?

ANSWER: a. Ground operating (OPTEMPO) - Ground OPTEMPO by vehicle type not available any earlier than fiscal year 86. Estimates are that the trend is virtually identical to figures for 86-89 below. No comparison between roundout and non-roundout is available; however funding priority is normally given to units with the higher Department of the Army Master Priority List (DAMPL) sequence. Some non-roundout units actually deploy before some roundout units. This OPTEMPO is marginal and the trend is downward for fiscal year 89.

TYPE	FISCAL YEAR		
Combat Vehicles (Miles)	86	87	88 (Projected)
Tank Main Battle M60 Series	237	225	212
M113 Armored Personnel Carrier	175	175	212
Vehicle Track Recovery (M88)	275	275	212
TOW Vehicle (track)	175	175	212
TOW Vehicle (1/4 ton wheel)	475	475	212
Combat Engineer Vehicle (CEV)	118	118	212
Mortar Carrier M106	212	212	212
Mortar Carrier (81mm)	225	225	212
Command Track (M577)	150	150	212
8 inch Howitzer self propelled	187	187	212
155 Howitzer self propelled	237	237	212
Tactical Wheeled Vehicles (Miles)			
Heavy Expanded Mobility Tactical Truck (HEMTT)	875	1125	750
High Mobility Multipurpose Wheeled Vehicle (HMMWV)	875	1125	750
Commercial Utility Cargo Vehicle (CUCV)	1125	1125	750
Truck Cargo 2 1/2 ton	425	425	425
Truck Cargo 5 ton	500	750	750
Truck Cargo 10 ton	350	350	350
Heavy Equipment Transport (HET)	725	725	725
Tractor full tracked with dozer (construction equipment)	450	625	625

b. These aviation OPTEMPO are expressed, as requested, by aircraft type. The USAR has more often expressed OPTEMPO in terms of hours per crew per month vice hours per aircraft per month. Aircraft OPTEMPO's for the USAR will be higher than those of the AC because the RC consistently sustains 100 percent (ALO 1) of its pilots on 50 to 75 percent (ALO 3) of authorized aircraft.

There is no difference in AIR OPTEMPO between roundout and non-roundout units since adequate flying hours are available. Roundout units could not fly more hours if available because the time (drills) become the limiting factor.

Aircraft	Inventory	Flying Hour Program	Hrs/Craft-FY 82
CH-47	43	4,000	7.6
OH-58	90	7,200	3.3
UH-1	391	50,000	10.6
UH-60	3	250	7.2
RU-21	7	750	8.9
T-42	8	1,000	10.4
U-8	20	2,321	9.6
U-21	5	1,500	25.0
TOTAL	567	67,021	

Aircraft	Inventory	Flying Hour Program	Hrs/Craft-FY 83
CH-47	43	4,000	7.6
OH-58	90	7,200	3.3
UH-1	391	55,100	21.7
UH-60	3	304	8.4
RU-21	7	810	9.5
T-42	8	1,000	10.4
U-8	20	3,251	13.5
U-21	5	1,818	30.0
TOTAL	567	73,483	

Aircraft	Inventory	Flying Hour Program	Hrs/Craft-FY 84
CH-47	43	4,020	7.6
OH-58	90	7,560	3.5
UH-1	391	53,050	11.3
UH-60	3	304	8.4
RU-21	7	810	9.2
T-42	8	1,098	11.4
U-8	20	3,545	14.7
U-21	5	1,818	30.3
TOTAL	567	72,205	

Aircraft	Inventory	Flying Hour Program	Hrs/Craft-FY 85
CH-47	43	4,050	7.6
OH-58	90	7,750	3.5
UH-1	391	56,093	11.9
UH-60	3	304	8.4
RU-21	7	810	9.5
T-42	8	1,098	11.4
U-8	20	3,932	16.3
U-21	5	1,818	30.3
TOTAL	567	75,855	

Aircraft	Inventory	Flying Hour Program	Hrs/Craft-FY 86
CH-47	43	4,487	8.6
OH-58	90	7,891	3.6
UH-1	391	56,093	11.9
UH-60	3	304	8.4
RU-21	7	810	9.5
T-42	8	1,098	11.4
U-8	20	3,932	16.3
U-21	5	1,818	30.3
TOTAL	567	76,433	

Aircraft	Inventory	Flying Hour Program	Hrs/Craft-FY 87
CH-47	26	4,304	13.7
OH-58	88	8,724	4.1
UH-1	354	64,526	15.1
UH-60	24	4,171	14.4
RU-21	6	1,012	14.0
T-42	5	875	14.5
U-8	15	3,800	21.1
U-21	5	1,645	27.4
TOTAL	523	89,057	

Aircraft	Inventory	Flying Hour Program	Hrs/Craft-FY 88
CH-47	26	5,187	16.6
OH-58	88	11,212	5.3
UH-1	354	60,326	14.2
UH-60	24	3,461	12.0
RU-21	6	1,008	14.0
T-42	5	775	12.9
U-8	15	3,583	19.9
U-21	10	4,200	35.0
TOTAL	528	89,752	

OPTEMPO

QUESTION. For the record, please provide ground operating tempo (by major vehicle type) and flying hours per month (for each major aircraft type) for the Army Guard and the Army Reserve since 1982. How do these OPTEMPO/flying hour rates compare for roundout and non-roundout units?.

ANSWER. Flying Hours for FY 82-87 follows:

Year	AH-1	AH-64	CH-47	CH-54	OH-6	OH-58	UH-1	UH-60
82	5.0	0	7.0	6.0	5.5	7.4	10.4	0
	C-7	C-12	OV-1	T-42	U-3	U-8	U-21	UV-18
	16.7	0	13.7	12.6	13.2	11.8	11.6	14.6
Year	AH-1	AH-64	CH-47	CH-54	OH-6	OH-58	UH-1	UH-60
83	4.6	0	5.6	6.7	5.5	7.1	10.0	0
	C-7	C-12	OV-1	T-42	U-3	U-8	U-21	UV-18
	17.4	26.9	13.8	11.7	13.9	13.7	14.0	21.1
Year	AH-1	AH-64	CH-47	CH-54	OH-6	OH-58	UH-1	UH-60
84	4.7	0	5.0	6.6	5.0	6.9	10.1	6.2
	C-7	C-12	OV-1	T-42	U-3	U-8	U-21	UV-18
	17.2	46.5	14.2	17.2	16.4	16.0	27.0	26.2
Year	AH-1	AH-64	CH-47	CH-54	OH-6	OH-58	UH-1	UH-60
85	6.7	0	6.9	6.7	5.9	7.2	10.2	4.2
	C-7	C-12	OV-1	T-42	U-3	U-8	U-21	UV-18
	15.5	33.1	14.0	18.8	19.5	15.5	16.5	21.8
Year	AH-1	AH-64	CH-47	CH-54	OH-6	OH-58	UH-1	UH-60
86	6.7	0	7.9	6.7	4.4	7.0	11.0	5.9
	C-7	C-12	OV-1	T-42	U-3	U-8	U-21	UV-18
	14.0	21.8	13.5	11.2	14.8	16.2	13.8	22.1
Year	AH-1	AH-64	CH-47	CH-54	OH-6	OH-58	UH-1	UH-60
87	8.8	0	6.4	7.1	6.1	7.7	10.1	6.3
	C-7	C-12	OV-1	T-42	U-3	U-8	U-21	UV-18
	19.2	24.7	12.8	10.5	30.2	15.8	14.2	19.1

Army National Guard (ARNG) aviators must meet the same minimum individual training requirements as the active duty aviator. Flying hour OPTEMPOs permit the accomplishment of that individual proficiency level. Those hours have been distributed accordingly. Limited flying hour resources do not permit differences between roundout and non-roundout aviation units in the ARNG. Moreover, it is unlikely that any substantial differences would be required.

ANSWER. FY 89 ARNG ground OPTEMPO for armored vehicles has been funded at 225 miles against a planning standard equal to 36% of the Active Component's OPTEMPOs. This OPTEMPO of 225 miles offers a marginal overall C^3 level of readiness by allowing more miles for high priority units and less miles for low priority units. Comparison to roundout vs. non-roundout is not available at this time. However, it is generally accepted that roundout units, which must achieve a higher level of readiness, have a higher rate of OPTEMPO than non-roundout units.

An ARNG OPTEMPO reflecting 25% of the Authorized Active Army tempo was established for the first time in 1984. The ARNG OPTEMPO was increased in 1985 to 36% and has not been changed. Accordingly, there is a need for increased OPTEMPO over the funded level.

TYPE	ACTIVE COMPONENT OPTEMPO	ARNG AUTHORIZED OPTEMPO	ACTUAL FY 89 FUNDED OPTEMPO
Combat Vehicles (Miles)			
Tank Main Battle M60 Series	850	306	225
Fire Support Team Vehicle (FISTV)	850	306	225
Improved TOW Vehicle (ITV)	850	306	225
Bradley Fighting Vehicle	850	306	225
IFV/CFV M2/M3	850	306	225
M113 Armored Personnel Carrier	850	306	225
Multiple Launch Rocket System (MLRS)	850	306	225
Howitzer Self-Propelled 8" and 155mm	850	306	225
Tactical Wheeled Vehicles (Miles)			
Heavy Expanded Mobility Tactical Truck (HEMTT)	3000	1080	799
High Mobility Multipurpose Wheeled Vehicle (HMMWV)	4000	1440	932
Commercial Utility Cargo (CUCV)	5900	2124	1593
Truck Cargo 2-1/2 Ton	5000	1800	1332
Truck Cargo 5-Ton	2000	720	540
Communications/Electronics (Hours)			
Automatic Telephone Central AN/TTC39	1800	648	479
Switchboard Central AN/TYC-39	1800	648	479
Electronic Test/Repair System	2080	749	554
Battery Computer System (BCS)	1500	540	400
Radio Terminal AN/TRC-173	2016	726	537
Radio Repeater Set AN/TRC-138	2016	726	537
Communication Terminal Teleprinter	2190	752	584
Tactical Army Combat Computer System (TACCS)	2600	936	693
Mobile Subscriber Equipment	2700	972	719

GUARD AND RESERVE

QUESTION: The Navy recently announced the deployment of the Naval Reserve Frigate USS SIDES (FFG-14) to the Persian Gulf. The SIDES follows the JOHN A MOORE (FFG-19) and other Reserve minesweeping vessels to the Persian Gulf. What are the crew ratios between active Navy, TARS and Selected Reservists for these ships?

ANSWER: Upon deploying the combined onboard manning mix for the five NRF Minesweepers was approximately 90% Active Navy, 5% TARS, 5% Selected Reservists, and for the two NRF Frigates 64% Active Navy, 24% TARS, 12% Selected Reservists.

QUESTION: How long are the Selected Reservists deployed?

ANSWER: Selected Reservists serving on the minesweepers are deployed for no more than four months, and rotate with other non-deployed minesweeper crews as do their USN counterparts. Unusually arduous living and working conditions aboard minesweepers necessitate this limitation. Most of the Selected Reservists on the Frigates are deploying for six months.

QUESTION: Are they the same Selected Reserve personnel that were assigned to the ship as their normal assignment?

ANSWER: In some cases the Selected Reservists are from the ship's Selected Reserve crew but most are Reservists from other units.

QUESTION: Due to limitations on Selected Reservist deployments and Naval Reserve vessels, can Navy Reserve ships carry out law enforcement and drug interdiction missions? Have they been used in this manner?

ANSWER: Naval Reserve Force (NRF) ships can perform law enforcement operations when adequate personnel are on board for safe operation and consistent with scheduling limitations imposed on these ships. NRF ships have performed law enforcement and drug interdiction missions in conjunction with scheduled underway training and operational periods on a number of occasions.

QUESTION: Please provide steaming days and steaming hours for Naval Reserve vessels (by class of ship) for 1982 through 1989 (estimated).

ANSWER: The following table summarizes quarterly OPTEMPO and annual underway steaming hours. Naval Reserve OPTEMPO underway levels are determined by the availability of the Selected Reserve crew to participate in underway training with additional days factored in to support underway required maintenance and active crew training evolutions. Since Selected Reserve crew availability for underway training is not a function of ship class, OPTEMPO is developed and requested as an executable average for all ship classes operated by the Naval Reserve.

FISCAL YEAR	OPTEMPO (days/qtr)	TOTAL ANNUAL STEAMING HOURS*
1982	14.7	40,930
1983	14.7	31,637
1984	14.7	37,075
1985	14.7	36,122
1986	14.7	36,613
1987	21.0	47,307
1988	21.0	47,881**
1989	21.0	63,150

* Annual steaming hours are a function of ship inventory and operational months (i.e., months that a ship is available for underway operations and not involved with a maintenance availability).

** Five MSOs and two FFG-7 class ships were deployed to the Middle East in support of the active forces. Their steaming hours during this period were funded by the O&MN appropriation and are not included here.

QUESTION: How could the call-up authority for 200,000 selected reservists be used for manning of Naval Reserve ships?

ANSWER: Such a call-up could be executed in accordance with section 673b of Title 10 United States Code. The President could order NRF ships (SELRES) crews to active duty for up to 90 days, with a 90 day extension subject to Congressional approval. Crews would report to respective ships within 72 hours. SELRES crews would have reemployment rights when released from active duty.

QUESTION: Please describe the impact on the Navy Reserve of losing 9,100 end strength (and 1,674 TARs) from the original 1989 budget request?

ANSWER: The impact to the Navy is considerable and is not just limited to the Naval Reserve. You must remember that, because the Naval Reserve today contributes a significant amount to the Navy's current mission, the Navy has a great and undeniable interest in the proper manning of many Reserve units. Thus, when you reduce our TAR end-strength, Navy has no choice but to back-fill these suddenly vacant TAR billets with active component personnel. Failure to do this would mean that Reserve ships and squadrons, already only partially manned with an active complement, would not be able to meet scheduled commitments, disrupting the employment of active units.

Thus, the impact of Congressional reductions to TAR strength is really felt two ways: first, the training of Selected Reservists suffers. Navy uses TARs because they are career Reserve program managers. Like their USN counterparts, they rotate between sea and shore duty assignments. But in these assignments they are continuously supporting the Selected Reservists, which allows them to develop a unique expertise in Reserve program management. Recent operational experience and Reserve program expertise are the ingredients that make TARs so essential to Selected Reserve training, and is a combination that the USN substitute is hard-pressed to equal.

Second, USN active strength suffers. As I explained, Navy is forced to take USN personnel out-of-hide to backfill empty TAR billets. Coupled with Congressional reductions to active strength, this means that additional USN billets go vacant with resulting negative impact on our USN personnel op tempo goals. To the extent that Navy does not accommodate TAR reductions, our support of Selected Reservists is eroded. We have taken reductions in personnel support detachments, Naval Reserve Centers and Air Stations. Also, reductions taken at the Naval Support Activity, New Orleans and in explosive ordnance disposal units will directly result in Selected Reservists not getting the training they need to be ready. We are approaching, and may already be at, a point where we will have to stand-down units because the TAR support is not there. We have tried to prevent this in the way we took the reductions. Given the Navy Reserve modernization efforts of the last six years, we are treading in new territory trying to manage record numbers of units and Selected Reservists, and we must have increased TAR personnel levels to provide the necessary training.

The drilling Reserve strength increase contained in the original FY 1989 request support a continuum of previous years' growth toward fully manning the Navy's Selected Reserve requirement as determined by the Navy Manpower and Mobilization System (NAMMOS). The impact of reducing the strength to the FY 1988 level will result in an increasing shortfall of training Reservists available for immediate mobilization. The majority of strength lost in FY 1989 was generally an extension of these reductions resulting from the FY 1988 Authorization Act. The additional FY 1989 reductions will result in the continued deferral of achieving full manning in the following Selected Reserve augmentation unit types: construction forces, medical support, ship augmentation, base support and logistics, and operations headquarters.

QUESTION: Please describe Reserve SIMAs and their relation to active Navy SIMAs? (Please note location and staffing levels for Reserve SIMAs)

ANSWER: SIMA Naval Reserve Maintenance Facilities (NRMF) have been established in homeports which support several Naval Reserve frigates to accomplish organizational and intermediate level maintenance. SIMA NRMFs are located at Newport, Philadelphia, San Francisco, and Long Beach. Two additional NRMFs are planned at New York and Puget Sound. Eighteen Naval Reserve units support these four SIMA NRMFs with a combined total Selected Reserve allowance of nearly 1300. SIMA NRMFs have a programed total active duty allowance of approximately 1600. Active duty personnel who are assigned to support active ships at the ports where SIMA NRMFs are located are accounted for separately. These personnel and SIMA (NRMF) personnel work in the same shop areas, and are allocated work in support of ships, active or Reserve, to ensure optimum workload management efficiency. SIMA NRMFs bear the same relationship to U. S. Navy SIMAs as they do to other SIMA (NRMFs). They are separate and distinct entities but assist each other in sharing fleet maintenance workload so as to provide maximum responsiveness and economy. Both are accountable to the Type Commanders whose ships they support.

QUESTION: What are the cost savings, if any, for a Reserve vessel as compared to an active Navy vessel?

ANSWER: In general terms without addressing specific ship types, operating costs are split into two groups, fixed and variable. Fixed costs remain roughly the same regardless of

Active or Naval Reserve assignment. Variable costs increase or decrease as a function of operating tempo and the mix of active duty and Selected Reserve personnel. Variable costs do vary depending on whether a unit is Active or Reserve.

The following costs are variable and are tied to operating tempo and/or personnel manning. Cost savings would be expected for a Reserve ship in Personnel, Fuel and Fleet Temporary Additional Duty. However, cost increases would be expected in Utilities, Transfer Costs and Intermediate Maintenance. Transfer Costs are onetime costs to make a ship ready for the Naval Reserve. The major savings realized by placing ships in the Naval Reserve is in active duty end strength and reduced OPTEMPO requirement when compared to active force deployment requirements.

QUESTION: Please provide a summary/timetable for the Navy Reserve's build-up of mine warfare ships.

ANSWER: The present aging Ocean Minesweepers (MSOs) will be replaced by 14 Minecountermeasures Ships (MCM) and 17 Coastal Minehunters (MHC). The first MCM has already been commissioned. As MCMs and MHCs enter the fleet, MSOs will be decommissioned. The Navy has experienced some delays in both the MCM and MHC programs and is reviewing options for attaining an optimum Active/Reserve force mix of these ships in consideration of potential non-mobilization requirements to use these ships overseas. Once this review is completed, a plan will be provided.

QUESTION: What training and personnel challenges will this modernization require?

ANSWER: We expect the normal training and personnel challenges associated with receiving new equipment which requires specialized training and experience. Providing Selected Reserve manning will continue to be a challenge as it is with all NRF ships, but we expect to be able to man and operate any of these ships which may be assigned to the Naval Reserve.

GUARD DRILL STRENGTH

QUESTION: The Air National Guard is actually programmed to experience a decrease in paid drill strength. General Conaway, why is this decrease proposed? What are the impacts?

GENERAL CONAWAY: The proposal is the result of fiscal constraints. The Air Force was faced with a $10 billion cut to meet Department of Defense budget targets. The Air Guard played in this exercise as a partner in the total Air Force and the results show up in a smaller ANG force structure. Specifically, the ANG is decreasing communications personnel, slowing down growth in medical manning, and experiencing some downsizing in our flying units. The end result is a smaller Air National Guard force. These reductions will have an impact on the ANG's capability to support the total force and to fulfill its wartime tasking.

CONVERSION GUARD/RESERVE AEROSPACE RESCUE AND RECOVERY UNITS

QUESTION: Generals Scheer and Conaway, please provide a status report on the conversion of Aerospace Rescue and Recovery aircraft being converted to backup status. How many such units have been deactivated or reduced (by location) during the past few years, and how many (by location) will be reduced in 1988/89? What impact do these conversions have on combat capability and civilian search and rescue?

GENERAL SCHEER: The only Air Force Reserve Aerospace Rescue and Recovery Squadron (ARRS) to be deactivated was the 303 ARRS at March AFB, California. That unit converted to C-130B aircraft in 1985 and its HC-130s were used to robust the 304 ARRS at Portland International Airport, Oregon. Two Air Force Reserve units will convert aircraft to backup status in Fiscal Year 1988. The 305 (ARRS) at Selfridge Air National Guard Base, Michigan will convert one H-3 helicopter to backup status and the 304 ARRS will convert one H-3 helicopter and one HC-130 to backup status. Two units are programmed to convert aircraft to backup status in Fiscal Year 1989. The 304 ARRS will convert another HC-130 to backup status and the 301 ARRS at Homestead AFB, Florida will convert one H-3 helicopter to backup status. These actions do have a negative impact on Air Force combat rescue capabilities because there will be fewer rescue aircraft available to accomplish the mission. The impact on civilian search and rescue capabilitiy is difficult to assess. Each of the three units will still have at least three helicopters and four HC-130s which could be employed for civilian search and rescue as a by-product of unit training for their wartime mission.

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GENERAL CONAWAY: The Air National Guard was reduced one HH-3 helicopter at both Moffett NAS, California and at Suffolk County, NY in FY88. This left the units with 5 H-3 helicopters as primary assigned aircraft (PAA). On 1 October 1988, the Suffolk County unit will lose one HC-130P primary assigned aircraft to backup aircraft inventory (BAI). The Moffett NAS unit is also scheduled to reduce their helicopter PAA from 5 to 4 (also to backup inventory) in FY89/1. These reductions impact on our availability to support active duty missions such as Iceland or Alaskan theater requirements, Space Shuttle support and other high priority taskings. Lack of airframes, personnel and the resources to operate will definitely impact on the Air National Guard's support of civilian search and rescue.

GUARD/RESERVE PERSONNEL IMPACT BASED ON AIRCRAFT CHANGES

QUESTION: What are the impacts on Air Force Reserve and Guard personnel when the Air Force reduces various units by a few aircraft here and there? Do crew members transfer to other units or are they lost to the Guard Reserve?

GENERAL SCHEER: The impact of the loss of a few aircraft on a reserve unit's personnel is inversely proportional to the number of aircraft it has been operating. Both crew member and maintenance personnel billets will be lost. A rescue unit with only 3 helicopters would feel such a loss much more so than an associate squadron with 18 C-141's. When funding flexibility exists, commanders have the authority, on a temporary basis, to overman such billets in extraordinary circumstances to allow time to place personnel who have the flexibility to move in units where vacancies exist or retrain them into existing job vacancies on the same installation. However, most Reservists, especially the enlisted force, do not have the flexibility to participate in distant Reserve units (such as airline pilots might have) and, therefore, are lost to the Reserve when their positions are deleted.

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GENERAL CONAWAY: The personnel impact to the Air National Guard (ANG) is significant for units reduced by these few aircraft, especially in terms of the loss of highly trained individuals. Since ANG units are supported by personnel from the local communities, most members are not willing to relocate to like units in other states. Therefore, most unit manpower reductions represent losses to the ANG and to our National defense capability.

GUARD/RESERVE FLYING HOURS

QUESTION: What are the flying hours per month for Guard and Reserve aircraft (by major aircraft type as compared to the active Air Force? Please provide this data (by year) since 1980.

ANSWER: The Air Force response follows:

Average Pilot Flying Hours Per Month
(Line Pilots Plus Wing Staff)

		1980	1981	1982	1983	1984	1985	1986	1987
A-10:	Active	17.8	18.4	19.4	19.1	18.5	18.9	18.1	18.7
	ANG	12.0	12.8	12.0	12.2	12.8	13.0	10.7	11.0
	AFRES	16.6	12.8	12.2	12.6	13.6	13.3	11.8	11.3
C-5:	Active	17.0	17.1	19.2	17.9	21.3	19.4	19.0	20.2
	ANG	--	--	--	--	--	9.1	7.7	9.2
	AFRES	12.1	12.5	12.6	12.8	13.1	11.3	9.2	9.5
C-9:	Active	28.4	28.3	28.6	29.7	30.9	28.3	28.6	26.7
	AFRES	14.1	16.2	18.0	16.3	16.6	18.3	13.9	12.7
KC-10:	Active	9.7	13.1	22.0	22.6	23.1	23.2	18.4	19.1
	AFRES	--	11.8	12.0	17.9	17.8	19.4	16.5	16.5
C-130:	Active	24.0	23.0	25.0	25.1	25.4	22.3	21.1	20.3
	ANG	15.0	14.5	14.4	13.6	15.2	15.0	14.0	15.0
	AFRES	14.3	14.5	14.7	13.9	14.7	14.5	13.4	13.5
AC-130:	Active	16.5	16.9	16.7	19.3	27.6	27.2	19.7	19.3
	AFRES	13.9	16.8	16.4	14.6	17.0	16.1	16.1	16.3
HC-130:	Active	17.7	21.0	19.2	20.1	19.9	21.3	19.2	19.2
	ANG	13.4	14.2	14.3	12.2	11.4	10.5	12.2	12.7
	AFRES	15.5	14.9	13.9	14.5	15.6	14.0	14.4	14.2
WC-130:	Active	19.6	16.7	23.4	21.4	24.7	25.5	21.0	27.8
	AFRES	14.9	15.4	16.2	15.4	16.2	17.7	11.7	12.8
KC-135:	Active	16.7	15.9	16.9	16.3	18.0	17.3	15.5	16.6
	ANG	13.9	14.2	14.7	14.2	15.6	15.0	13.4	14.2
	AFRES	15.6	15.9	16.2	16.2	16.5	16.0	14.7	14.9
C-141:	Active	26.6	27.3	27.4	27.1	29.9	26.8	26.4	26.5
	ANG	--	--	--	--	--	--	5.6	11.5
	AFRES	13.0	13.1	13.1	12.5	13.4	12.8	10.1	10.0
F-4:	Active	13.0	12.5	14.2	13.9	15.2	15.4	14.0	13.7
	ANG	9.8	9.7	9.5	9.6	10.0	10.4	9.2	9.5
	AFRES	10.1	10.0	10.5	11.3	11.8	11.7	9.9	9.8
F-16:	Active	13.6	12.7	14.5	15.2	17.4	15.8	14.8	15.1
	ANG	--	--	--	10.2	10.8	9.8	10.3	11.5
	AFRES	--	--	--	16.3	11.7	12.2	10.6	9.7
H-3:	Active	17.0	17.1	16.1	17.2	18.1	20.0	16.4	16.0
	ANG	10.1	9.3	8.9	8.8	10.7	9.9	11.7	9.4
	AFRES	10.1	11.4	10.2	12.2	14.1	14.0	13.9	10.3
Total:	Active	19.6	19.1	20.2	20.0	21.6	20.0	18.8	19.0
	ANG	13.4	13.2	13.0	12.3	13.3	13.1	11.9	12.7
	AFRES	13.5	13.6	13.6	13.3	14.0	13.6	11.6	11.5
Total Force:		17.2	16.9	17.4	17.0	18.2	17.3	15.9	16.0

GUARD/RESERVE PILOT RETENTION

QUESTION: Please provide a status report on pilot attrition, induction, and training for the Air Guard and Reserve. What percentage of Air Force pilots join either the Guard or Reserve after release from the active force? Do you have more applicants than you can take? Are you having any special problems in types of aircraft/missions?

GENERAL SCHEER: The 32 percent figure used by General Conaway reflects the low attrition experienced by the Reserve aircrews. While our units receive many applications from qualified pilots who have separated from the active force, we have openings for only a few of them because, on the average, each Reserve unit loses only one aircrew per year. This high retention rate is experienced throughout our flying mission structure. Since we are able to fill our few openings with highly qualified pilots with recent active duty experience, pilot training is minimal.

QUESTION: Please provide a status report on pilot attrition, induction and training for the Air Guard and Reserve. What percentage of Air Force pilots join either the Guard or Reserve after release from the active force? Do you have more applicants than you can take? Are you having any special problems in types of aircraft/missions?

GENERAL CONAWAY: During FY 1981-1986, a total of 10,112 pilots left the active force. Of this total, 493 subsequently joined the Air National Guard and 654 joined the Air Force Reserve. The six-year average shows that 32 percent of those eligible to join the reserve components actually did, while 68 percent did not. Comments from field commanders indicate that we do have more applicants than we can take. However, we do not have statistical data to support this opinion. And, no, we do not have any special problems in types of aircraft/missions. Our accessions during this six year period mirrored our force structure.

QUESTIONS SUBMITTED BY SENATOR PROXMIRE

ARMY RESERVE SHORTFALL

QUESTION: General Ward: We were told during yesterday's hearing on the Army budget that 26,000 new Army reserves will not be absorbed into the system because of budgetary belt tightening. Can you explain what the impact of this situation will be for the future, especially how it will affect the force stability and the readiness of the Army Reserve?

ANSWER: The USAR portion of the 26,000 Reserve Component reduction to programmed FY89 end strength growth consists of 7,600 paid drilling Reservists, 2,700 full-time support personnel (Active Guard/Reserve), and 8,200 Individual Mobilization Augmentees. This represents the difference between our original FY88-89 budget submit and the amended FY89 submit driven by current resource constraints.

Of the three categories of Selected Reserve, the decrement to IMA growth is least significant and easiest to absorb in the near term. Lack of these resources will, however, degrade our ability to rapidly expand the force and fill positions that would release Active component soldiers for combat duty. We should rectify this shortfall when resources are available.

The effect of lost growth in the paid drill strength and AGR categories is more significant and has much broader implications. The growth in USAR force structure supported by this programmed end strength is an integral part of the fabric of the Army's long term modernization program. Growth in existing units results from reconfiguring them to new designs consistent with the active and ARNG units they support on the battlefield, and from the integration of modernized systems. New units fill voids in our capabilities to provide coherent forces to support the warfighting CINCs under current doctrine and in the current threat environment. Wholesale cancellation of these actions would cause severe turbulence in the USAR. This turbulence would require several years from which to recover, potentially unhinge important parts of the total Army's warfighting capability, and probably result in significant costs.

We have, therefore, opted for a prudent measured response to these reductions. We will proceed with execution of the USAR FY89 force structure program essentially as planned, and consciously accept the attendant modest increase in hollowness of some units for the short term. We will then work to reduce this hollowness over a period of several years through a combination of initiatives. Each year we find that some programmed structure cannot be executed as planned for a variety of reasons. Beginning this year, we will manage our program even more intensely than in the past, identify these problem actions as early as possible, eliminate those that we find can not be executed, and redistribute the resources. We will also review the force and focus on units that have long term readiness problems. Those that cannot be brought up to standards within available resource constraints will be considered for inactivation. Integral to that effort is the acknowledgement that the demographics of the United States are changing and some units will have to be relocated to attain/maintain acceptable strength levels based on the changing recruiting environment. Finally, if necessary, we will select units with the lowest priority for support of the warfighting CINCs as candidates for inactivation over the long term so that remaining resources can be applied to the most critical warfighting and support needs.

RESERVE F-16 PILOTS

QUESTION: I have seen in your proposal that the modernization of the fighter aircraft in the Air Force Reserve has been pushed back, and in some cases planes have been eliminated. This means that fewer F-16s will be available for the Reserve. It costs $1.6 million to train every F-16 pilot (according to the FY86 budget). Can you tell us if the Air Force Reserve will fail to attract F-16 pilots who retire from active service because there are not enough planes for them to fly and what this may cost us to train new pilots?

GENERAL SCHEER: The loss of F-16 cockpits means that the Air Force Reserve will be able to accept fewer of the pilots separating from active duty with less than 20 years active service. (The Air Force Reserve does not recruit retiring pilots into the Selected Reserve; they instead go into Active Duty Retiree status and are subject to recall until age 60.) Because the Reserve will try to use the displaced crews to fill the few vacancies occurring in the remaining aircraft, our absorption of pilots separating from active duty may drop below our historical 32 percent rate. Since Active Air Force pilot training is based on active duty requirements and the Air Reserve Components primarily obtain pilots who have been fully trained by the active force, we see no impact on pilot training costs.

RESERVE AIRCRAFT REPLACEMENT COSTS

QUESTION: Also, it has been suggested that it is less expensive to promptly replace F-4s with F-16s, rather than to wait as your budget suggests. Can you comment on this suggestion?

GENERAL SCHEER: Replacing F-4s with F-16s in the Air Force Reserve does save money as well as increase combat capability. However, the number of F-16s available to modernize Reserve units is dependent upon the availability of F-16s either through active force reductions or new procurement. If F-16 procurement were increased, more Reserve F-4s could be replaced with increased cost savings to the Department of Defense. The Air Force recently announced deactivation of two active F-16 wings, which will accelerate modernization of several Guard and Reserve F-4 units. The Air Force position is that no additional F-16 active force structure should be reduced and that F-16 procurement is at the maximum level possible under present fiscal constraints.

FLYING HOURS

General Temple: In reviewing your prepared statement I noticed that the number of flying hours for the Army National Guard aviation units will not meet the minimum training requirements. You state in your text that these units will experience reduced training readiness. It seems to me that this area of readiness is not one that the National Guard would want to jeopardize.

QUESTION. Can you tell us how the Guard can meet its minimum training requirements, and what the implications will be if it can not meet these requirements?.

ANSWER. The Army National Guard (ARNG) appreciates the interest on flying hour OPTEMPOs for fiscal year 1989. Previous force structure changes and logistics issues caused slight under execution in FY 84-86. Subsequently, budget reviews in FY 87 within the Department of Defense decremented the FY 88/89 flying hour program (FHP). Our reclamas for increased flying hour resources based on known aviator force structure growth were unsuccessful. Recent Congressional interest in this issue caused the Chief of Staff, Army to review the ARNG FHP and direct that adequate resourcing be provided for the ARNG to meet minimum aircrew training requirements in FY 89. Adjustments to the ARNG FHP for FY 89 - 94 are being coordinated within the Army staff.

Should adequate resourcing not be made available, minimum training requirements cannot be met. Unit readiness and ability to fulfill mission requirements will be decremented.

QUESTION. Also, where is the money being spent that is needed to fund the hours in the air needed to meet the minimum requirements?

ANSWER. Due to Program Budget Decision #061 in the Fall of 1986, funding for FY 89 Flying Hour Program decreased from $60,717,000 with hours of 395,477 to $57,255,000 with hours of 388,350. To meet Army Budget reductions in the Amended FY88/FY89 Biennial Budget, flying hours program had to be decreased to $55,623,000. Therefore, the money is no longer in the OMARNG appropriation to be spent. Fewer flying hours are available, also, because of the cost per flying hour increasing from an estimated 155.23 in the FY88/FY89 Justification Book to 163.52 in the Amended FY88/FY89 Biennial Budget.

QUESTIONS SUBMITTED BY SENATOR BYRD

EQUIPMENT

Question. To what extent does the FY89 budget provide for the modernization of Army Reserve Component Roundout unit equipment--not just in the more visible areas of major weapon systems, but in the equally vital, if less "glamorous" areas of communications, logistics, and maintenance?

Answer. The Army Reserve has one roundout unit, the 205th Infantry Brigade (Light)(205th IB(L)), which supports an active component (AC) unit, the 6th Infantry Division (Light)(6th ID(L)). The FY89 budget generally makes the same provisions to this USAR unit as for its parent unit, one exception being the Squad Automatic Weapon (SAW). The SAW was distributed to the 6th ID(L), but the Army terminated production before fielding to the 205th. Funding for the Small Unit Support Vehicle (SUSV) was reduced so that the exact delivery mix between the active unit and its reserve roundout unit has yet to be determined.

The Army distribution policy is to modernize the roundout unit simultaneously with its parent unit. The position of the reserve unit within the Department of Army Master Priority List (DAMPL) is close to that of the AC unit which it rounds out; therefore, equipment programmed for delivery to the AC unit would be delivered concurrently to its roundout unit. Despite this policy, numerous maintenance and supply problems, not yet addressed in any budget, remain for the 205th because of the mix and variance of old and modernized equipment. These mixtures can complicate tactical communications between the 205th and the 6th; raise fuel handling requirements to accommodate both diesel and gasoline powered vehicles and other equipment; and require extra tools, test equipment, and repair parts. These additional requirements may hamper mobilization of the 6th ID(L).

ARMY RESERVE

Senator Byrd. If virtually all active Army divisions in our strategic reserve require Roundout brigades and/or battalions to fight at full strength upon mobilization, it is imperative that the Reserve Component command and staff of these Roundout units be technically knowledgeable and have the requisite leadership ability. What is the Army doing to insure that its Roundout brigade and battalion commanders and staffs have requisite professional military education and unit training experience to meet the demands of modern war? Do Army Reserve Component senior officers have adequate levels of, and access to, professional military education?

General Ward. The Army Reserve is making every effort to insure that we have our best qualified officers serving in battalion and brigade commander and staff positions. Our selection process is very competitive. We are fortunate that the majority of these officers entered the Army during the Viet Nam era and many have firsthand knowledge of the importance of technical and tactical proficiency to combat readiness if their soldiers are to survive on the modern battlefield.

The Chief, Army Reserve conducts professional development education boards to select USAR officers to participate in senior service colleges, both in resident and correspondence. Participation of USAR officers in senior service college education provides an outstanding training experience and allows a direct interface and exchange of views, ideas and experiences with Active Component officers.

A battalion/brigade pre-command course was established to prepare lieutenant colonel and colonel command-designees for assumption of command positions in Active and Reserve Component units. This intense course is presented through combination of individual study and attendance at a two-week phase. The "How to Fight" and "How to Command" modules emphasize doctrine, training, force integration and leadership development. This course includes branch/functional area training taught by the proponent Army service schools concentrating on systems proficiency, training concepts/techniques, and missions tasked to battalions and brigades.

The Combined Arms and Services Staff School provides training in communication, analytical and leadership skills for those officers assigned/selected for staff positions at battalion, brigade, and division/installation level. This course has provided invaluable training experience and directly contributes to the professional development of officers to assume command and staff positions of increased responsibility. The Army Reserve is continuously seeking additional opportunities which contribute directly to improved readiness.

OFFICER TRAINING IN ROUNDOUT UNITS

If virtually all active Army divisions in our strategic reserve require Roundout brigades and/or battalions to fight at full strength upon mobilization, it is imperative that the Reserve Component command and staff of these Roundout units be technically knowledgeable and have the requisite leadership ability.

QUESTION. What is the Army doing to ensure that its Roundout brigade and battalion commanders and staffs have requisite professional military education and unit training experience to meet the demands of modern war?

ANSWER. The Army has just concluded a "Reserve Component Training Strategy for the Future Study" and has presented the initial recommendations to the Chief of Staff, Army. Within this study are recommendations that will enhance the current Reserve Component officer training program. While all the recommendations are not palatable to the Reserve Components this study offers an improvement and modernization to the current officer education and training program.

Some of the key recommendations within the study are:

1. Attendance of a resident Officer Basic Course (OBC) within one year of graduation from college.
2. Attendance of a resident Tactical and Technical pre-command training course prior to assuming command.
3. Completion of the Officer Advanced Course by the 8th year.
4. Completion of the Combined Arms Services Staff School (CAS3) by the 12th year. This would qualify individuals for promotion to Lieutenant Colonel.
5. Completion of a battalion or brigade commanders training program prior to or concurrent with the assumption of command.

6. Completion of a reduced Command and General Staff Officers Course (C&GSC) for promotion to Colonel.

7. Establish a Reserve Component Student Account that would allow Reserve Component officers to meet the above mentioned educational/training requirements.

The study is currently being reviewed by the Reserve Components. The recommendations that are proposed by the ARNG and the USAR will play a key roll in the improvement and the implementation of the educational and training experiences that will enhance the training of the Reserve Component officers. These recommendations will be going forward in the near future.

QUESTION. Do Army Reserve Component senior officers have adequate levels of, and access to, professional military education?

ANSWER. The National Guard has sufficient quotas for professional military education courses up to the Command and General Staff Course level. Two areas are of some concern, however. If the Combined Arms and Services Staff School (CAS3) course becomes a requirement for the M-Day officer, the numbers of spaces available for this course may become critical. The United States Army Reserve Forces (USARF) schools are currently installing this curriculum in their schools and should be able to handle any increase in student load created by this requirement.

A second area of concern is the Senior Service College (SSC) level professional development. The Army National Guard only receives ten spaces for the Army War College out of the 170 spaces that are available each year. Each year approximately 150 applications are received by the ARNG for the SSC level courses. The majority of these applications have to be turned down. An increase of just five spaces would significantly enhance the senior officer education within the ARNG. We are currently trying to obtain an increase in quotas at different facilities which would provided the same educational experience as received at the Army War College.

SIXTEEN FRIGATES

Question: Former Secretary of the Navy Webb asserted that the decision by Secretary Carlucci to completely retire 16 frigates as part of the FY89 budget cuts, rather than transferring them to the Naval Reserve, was not required in order to meet budget ceilings.

Why were the frigates not transferred to the Naval Reserve, preserving their capability for use upon mobilization?

Mr. Duncan: We recognize that in certain ways, the 16 frigates would be good training platforms for Naval Reservists. In the context of the budget reductions we have had to make, however, there are several limiting factors that lead us to believe that the ships should be retired, rather than transferred to the Naval Reserve Force.

First, the 6 FFG-1 and 10 FF1040 ships are 20-24 years old and they are unique in their poorly designed, complex, 1200 psi pressure fired boilers, i.e., power plants. Those plants have historically had severe and costly maintenance and supply problems. The ships have only two main feed pumps, while other, similar ships with two boilers have three main feed pumps. When one main feed pump is out, the ship can't get underway. Furthermore, the 1200 pound plants don't use forced draft blowers like other ships; rather, they rely on a supercharger which has a history of maintenance and supply problems. The 10 members of the Garcia Class Frigate also lack modern armaments. They have no missiles and their main armament are two 5 inch, 54 caliber guns. These factors alone discourage their use by operational commanders.

Second, we have learned from previous experience that when weapons systems that are no longer used in the active service are placed in a Reserve component, adequate parts, supply and maintenance support soon disappears.

Third, a transfer of these unique weapons systems to the Naval Reserve Force would create a serious manning problem. The boilers are too complex and maintenance intensive for a reduced active duty crew and each ships's Engineering Department would have to be 100 percent manned by active USN personnel. Ultimately, and because the Active Navy would have no similar power plants, there would be no flow of previously trained and experienced engineering personnel transferring from active service into the Naval Reserve.

Demographics would also limit further manning of the ships by members of the Selected Reserve from coastal Reserve Centers. Assuming the same homeports currently used by the ships, they would have to be manned by Selected Reserve units located inland. This would require dedicated airlift for each weekend drill and that in turn would require a priority change and compete with fleet airlift requirements. Some lower priority Selected Reserve units would have to be stood down in order to accommodate this unprogrammed manning.

Finally, a transfer of these older and uniquely complex ships to the Naval Reserve Force would be contrary to the Navy's horizontal integration/mirror image policy for the Naval Reserve.

Naval Reserve Minesweepers

QUESTION: **When Naval Reserve minesweepers were needed for the Persian Gulf operations, the Navy used the ships--but manned them with active duty sailors and Naval Reserve volunteers. This is the most recent example of a post-Vietnam War pattern of heavy reliance on the Reserve components, with public statements about the importance of the Reserves but unwillingness to involuntarily recall Reservists and/or National Guard members to active duty. Does this not suggest that it may be time to put more resources into the active forces of all services, and less in the Reserve components? Of what use is extensive Reserve component callup authority and funding for modern equipment, if the hugely expanded Reserve force structure is considered unusable--due to** the political traumas of mobilization--in any situation short of total war.

ANSWER: I recognize and share your concern about actions which appear to be inconsistent with the Total Force Policy. I have, of course, inquired into the question (it was also raised by the Senate Armed Services Committee during my confirmation hearing last October) regarding the utilization of Naval Reserve and active duty personnel aboard the Naval Reserve Force minesweepers in the Persian Gulf. I continue to believe that too much should not be read into the policy decisions which lay behind the deployment of the minesweepers, especially in the context of the President's authority to involuntarily recall Selected Reservists for contingency situations which do not require a total mobilization for war or a declaration of national emergency.

The circumstances of the deployment and the related manning requirements were not considered sufficiently critical by the Navy to require any form of mobilization or even a recommendation to the President that he invoke his callup authority pursuant to Title 10 U.S.C., Section 673(b). It is true that Selected Reservists assigned to the three Pacific Fleet minesweepers did not accompany the ships when they were deployed. The Navy has informed me, however, that there was insufficient time available to immediately and securely solicit and process enough volunteer Selected Reservists for a quick reaction, highly classified deployment. Selected Reservists did serve as Transit Group Commander and Staff Operations Officer aboard the ship which accompanied those three minesweepers. Several days later, 15 Selected Reservists did deploy as crew members aboard the 2 Atlantic Fleet minesweepers. Two Naval Reserve frigates have also deployed to the Gulf since that time with Selected Reserve volunteers as part of the ship's company. In addition, reservists from Naval Control of Shipping, security group, and intelligence units have been serving with the Middle East Force since convoy operations commenced. The Navy has also expanded the volunteer Selected Reserve role to include special boat unit crews and other areas of service. Today, there are 67 volunteer Naval Reservists on duty in the Persian Gulf, and additional volunteers are awaiting an opportunity to serve.

I have personally discussed the Navy's use of Selected Reservists in the Persian Gulf with the senior civilian and uniformed leadership of the Navy. I am satisfied that the Navy's actions regarding the minesweepers were reasonable. I take no position on whether the actions were the most appropriate actions that could have been taken, but I do not believe that the actions reflect evidence of a lack of commitment to the Total Force Policy. The deployment of the minesweepers does, however, underscore the importance of the question of whether or not a particular military capability, which may be critical to contingency operations, should reside exclusively in National Guard and Reserve units.

More than 5 years ago, then Secretary of Defense Weinberger succinctly captured the essence of the Total Force Policy when he observed that "we can no longer consider reserve forces as merely forces in reserve....Instead, they have to be an integral part of the Total Force...." The basic tenet of the Total Force Policy is that members of the National Guard and Reserve constitute the primary augmentation and expansion elements for active duty forces. National Guard and Reserve forces are highly competent, professional forces which can perform a wide variety of missions, either under voluntary or involuntary conditions, so long as they are sufficiently equipped, manned, and trained.

Contrary to your suggestion that the expanded Reserve force structure "is considered unusable--due to the political traumas of mobilization--," Guardsmen and Reservists have been and are currently being used in a wide variety of missions. In March, when 3200 active Army troops were sent to Honduras from Fort Bragg, North Carolina and Fort Ord, California, Air Force Reserve and Air Guard crews and aircraft were involved in the airlift of those troops. More than 100 Reserve airmen were notified to come in to support the operation and all promptly reported for duty. The first aircraft to land in Honduras was flown by a Reserve crew. At the time of that deployment of active U.S. Army divisions, there were close to 1,000 National Guard and Reserve soldiers in Honduras, located hundreds of miles from the border incident which prompted the move to Honduras of the troops of the 82nd Airborne and 7th Infantry divisions. These Reserve forces included engineer and medical units building farm-to-market roads and providing nation-building support in an area of our hemisphere where many people have never seen a doctor.

Very recently, two Louisiana Air National Guard F-15 fighter aircraft were scrambled to intercept two Russian Bear bombers and to escort them away from our eastern seaboard. Intercepts such as this occur with a fair degree of regularity and almost 80 percent of our nation's air intercept capability is in the Air National Guard. When this nation rescued the students from Grenada, the aircraft which airlifted those students was an Air Force Reserve plane with a full Air Force Reserve crew. At the same time, an Army Reserve Civil Affairs Unit from the Philadelphia area was activated and operated in Grenada for several days to assure a smooth transition for the civil government of Grenada. During the retaliatory strike against Libya 2 years ago, you may recall that the U.S. Aircraft were launched from Great Britain and had to fly a long and circuitous route to reach their target. Several mid-air refuelings of the attack aircraft were necessary, and some of the refueling aircraft were flown by Air Force Reserve crews. Large numbers of Naval Reservists also served, of course, aboard the U.S.S. NEW JERSEY (BB-62) off of the coast of Lebanon.

Consequently, our Reserve forces are consistently relied upon for unexpected contingencies, and they will continue to be critical to our national security requirements. Please be assured, however, that I will continue to be sensitive to any action which tends to undermine the vigor and effectiveness of the Total Force Policy.

NATIONAL COMMITTEE FOR EMPLOYER SUPPORT

QUESTION: Although there are specific rules and regulations protecting the civilian jobs of Reservists and National Guardsmen as well as their employers, friction still exists when Reserve Component personnel request to take time off to serve in uniform. Since 1972, the National Committee for Employer Support of the Guard and Reserve has put into action a number of initiatives that encourage employer support of those serving in the Reserve Components. Usually this work is conducted through state committees. In certain states, such as Wisconsin and Oklahoma, these initiatives have proven quite successful. However, since this work has been conducted at the state level, it has been uneven in its effectiveness. Do you feel that this work could be better organized and coordinated if it were more centralized at the Federal level?

ANSWER: The most effective resolution of a conflict between an employer and an employee who serves in a reserve component occurs when negotiated by persons knowledgeable of the situation and known by all parties. Our local volunteer ombudsmen identify the real needs of the Guard or Reserve unit, determine the employer's actual concerns and bring decision makers together in an informal setting. Supervisors unfamiliar with the company policy, commanders who don't consider the employee's situation when making last-minute changes and the Reserve Component member who abuses legal protection--these situations can be quickly resolved with simple coordination.

Our most effective tool remains education. When an employer is placed in a position to see the employee in the performance of military duties and understands the criticality of that performance in national defense, we win a "convert". Only local representatives can accurately identify the key managers at local level and ensure they participate in such demonstrations.

While it is a given that there are variations of effectiveness among state organizations, it must be recognized that there is rapidly increasing activity in all functions. Bosslifts, awards, ombudsman assistance, and command sponsorship by all services are increasing. While the national level agency remains funded and staffed such as it was in the 1970s, field activities have made a quantum jump.

The key to increased effectiveness remains the quality of the individual, volunteer State Chairman. This individual is the motivator for all supporting activities within a geographical area. His selection and support are singularly critical to the success of the local program.

Reserve Medical Readiness

QUESTION: Reserve medical readiness is crucial. We have looked into this issue on numerous occasions within the last few years. As things stand now, we simply do not have a sufficient number of doctor, nurses and other allied health professionals available in the event of an outbreak of hostilities. How do you intend to address this issue?

ANSWER: Achieving the ability to respond quickly and adequately to a wartime casualty flow has been one of my highest priorities and one of the most critical goals of my office and of the Office of Assistant Secretary of Defense for Health Affairs. Members of the staffs of both offices serve on all of the major medical readiness related groups within the Department and they continue to work together. The Department and the Services have taken a variety of actions to resolve this serious problems.

Each of the Services has committed significant recruiting resources to increase needed medical manpower. All of the Services programmed substantial growth in the number of medical recruiters beginning in FY 1988. The recruiters' efforts will be targeted toward wartime specialty requirements for officer and enlisted professionals.

Two reserve financial incentive programs, the Stipend Program, and the Health Professionals Loan Repayment Program, are being offered to selected health care personnel. The corresponding obligation in the Selected Reserve (SELRES) or the Individual Ready Reserve (IRR) is based on the amount of financial assistance. In 1987, the Congress increased the maximum ages for appointment (47) and retirement (67) of selected health professional in the Reserve Components (RC) and also provided the authority to award constructive service credit for nursing experience These changes will increase the number of physicians and nurses who are potential members of the RC.

In March, the Office of Health Affairs began a Direct Mail Marketing Campaign. Physicians and nurses will be contacted by a personal, signed, letter from Assistant Secretary Mayer. Each letter has been designed for the specific physician and nurse population needed to overcome the wartime shortage of medical personnel. This letter will advise them of the Department's shortfall, opportunities for participation, the benefits associated with reserve service, and will provide them with a phone number and business reply card in the event they desire further information.

The services are also exploring the flexible training options offered to health care professionals as well as testing new options that will minimize time involved while maximizing the quality of training. In conjunction with this concept, the Air Force is exploring the recruitment of surgical teams. This is similar to the civilian hospital unit utilized during

WWI and WWII that was so successful. We are continuing our vigorous efforts to explore these and any other programs that will provide a readily accessible pool of qualified medical professionals who could be utilized to meet Wartime requirements.

NATIONAL GUARD TECHNICIANS

QUESTION: Certain National Guard technicians have been very active in seeking competitive civil service status and the privilege of wearing civilian clothing while serving. What are your views with regard to competitive civil service status and the wearing of uniforms for National Guard technicians?

ANSWER: The Army National Guard and the Air National Guard are an integral part of the first line military defense of the United States. To fulfill its federal role, the National Guard trains toward readiness for immediate response to, deployment with, and integration into the active Army and Air Force. National Guard Technicians are federal employees employed to train and administer the National Guard and to maintain its equipment.

Congress made National Guard technicians Federal employees for the limited purpose of providing them uniform fringe benefits, retirement similar to other Federal employees, and conferring on them coverage under the Federal Tort Claims Act. The Technicians Act, 32 U.S.C. Section 709, was carefully constructed compromise which balanced the interests of the individual technician with the military requirements of the states. Congress granted Federal employees status on the condition that the states retain the military controls which they had prior to the Act. These were explicitly stated in 32 U.S.C. Section 709(e)(1)-(5). Courts have recognized and approved the compromise nature of the legislation. Any attempt in removing these "State characteristics of the National Guard" would destroy the balance and purpose of the Technicians Act.

Competitive service status for National Guard military technicians would seriously undermine the readiness of the Army and Air National Guard by de-emphasizing the military nature of the technician program. Any move from the current system would be significant in its extension of appeal rights to military technicians beyond the Adjutant General of a jurisdiction concerned, its application of reduction in force rules, its attachment of veterans preference to hiring practices, and adverse influences on retention of National Guard technicians. It was recognition of the unique role that military technicians play in the national defense structure that prompted Congress to except them from various provisions of Title 5, United States Code.

National Guard Technicians are required by Federal Law (32 U.S.C. 709) to hold and maintain military status and compatible military rank and duties as National Guardsmen as a prerequisite to employment and have always been considered "Military Technicians." They work on military equipment and records, work with military tools, use military supplies, follow military directives and procedures, and supervise military personnel performing additional or non-unit training. It is the universally held position of military command authorities that the wearing of the military uniform by technicians when performing National Guard related duties is essential to the mission of the National Guard. The wearing of the uniform fosters military discipline, promotes uniformity and regularity, encourages esprit de corps, increases readiness for early deployment, and enhances the identification of the National Guard as a professional.

Any attempt to change the status of technicians into competitive service and to allow the wearing of civilian clothing in the performance of their duties would remove the main pillars upon which the National Guard technicians program was constructed, and by diluting the command and management authority of the officer responsible for the readiness of the National Guard of each state, could significantly diminish the Guard's readiness and mobilization capability.

EQUIPMENT

QUESTION: Generally, the Reserves and National Guard have received surplus equipment from the Active forces. Under the Administration's expansion of the Department of Defense budget, the Reserves and National Guard have received new equipment along with the Active forces. Within the last few years, however, the defense budget has been reduced. There is concern that the Reserve Components will not receive their fair share of the defense budget and, as a consequence, their role under the Total Force concept will be sacrificed. What are your views on providing the Reserve Components with their fair share of defense resources?

ANSWER: The Department of Defense and the individual Services continue to pursue the policy of distributing equipment to Armed Forces units commensurate with their planned wartime employment. The Department's "First-to-Fight, First-to-be-Equipped" policy is intended to ensure that units employed first in a crisis will be adequately equipped prior to follow-on units, irrespective of whether the early deploying units are Active forces or Reserve forces. Over time, such a policy will ensure an equipment posture based upon need, rather than upon Active or Reserve status.

GUARD AND RESERVE PROGRAMS IN WEST VIRGINIA

QUESTION: Please update for the record the information provided last year regarding which construction projects are contemplated in the latest Reserve and National Guard Five-Year plans for West Virginia. Please indicate the project description, the location, the estimated cost and the fiscal year in which the project is contemplated, as well as include a standard form 1391 in the record for each proposed or ongoing project.

ANSWER: The Services have provided the following Reserve and National Guard information in millions of dollars:

PROJECT NAME	FY	EST COST
For the Army National Guard:		
Pt Pleasant Armory Add/Alt	88	1.0
Buckhannon ARNG Org Maint Shop	88	0.4
Camp Dawson ARNG Trng Fac Phase I	88	0.8
Camp Dawson ARNG Trng Fac Phase II	89	2.2
Camp Dawson ARNG Trng Fac Phase III	89	1.5
Parkersburg ARNG Aviation Spt Fac	89	5.0
Huntington ARNG Armory, Add/Alt	90	0.5
Camp Dawson ARNG Trng Fac Phase IV	90	0.8
Wheeling ARNG Aviation Spt Fac	90	3.8
Wheeling ARNG Armory, 100-person	90	1.5
Kingwood ARNG Armory, 200-person	91	2.1
Charleston ARNG Armory, 200-person	92	1.0
For the Army Reserve:		
New Martinsville USARC/OMS	88	1.4
Parkersburg USARC/OMS and AMSA	90	3.3
Rainelle USARC/OMS	94	2.2
Kingwood USARC/OMS	94	1.4

The Parkersburg USARC/OMS and AMSA project was moved from FY 1989 to FY 1990 and the Rainelle USARC/OMS project was moved from FY 1992 to FY 1994 due to budget decrements in FY 1989.

For the Naval and Marine Corps Reserves: There are no projects in the Five Year Plan for West Virginia.

For the Air National Guard:		
YEAGER AIRPORT (ANG)		
Fire Suppression System	88	1.5
Vehicle Maint/Ref Veh Shop	88	1.1
Security Police Add/Alt	89	0.3
Add/Alt Jet Fuel Stor Complex	89	1.7
Add/Alt Squadron Ops	89	0.9
Add/Alt Res Forces Ops Trng	91	1.5

Project Name	FY	Est Cost
EWVRA-SHEPHERD FIELD		
Avionics Shop	89	0.8
Res Forces Med Trng Fac	89	3.0
Alt Small Acft Maint Dock	90	0.5
Add/Alt Jet Fuel Storage	90	3.0

The following ANG projects have changed since the last update:

Project Name	Est Cost	Remarks
YEAGER AIRPORT (ANG)		
Acft Parking Apron/Holding Pad	3.3	Reprogramming requested to use FY 87 funds
EWVRA-SHEPHERD FIELD		
Alt Veh Maint Shop	0.2	Project deleted from the FY 89 MILCON; to be accomplished using O&M funds.

Project Name	FY	Est Cost
For the Air Force Reserve:		
MORGANTOWN		
Civil Engineering Training Facility	89	0.6

The Air Force Reserve has no other units or military construction projects planned for West Virginia.

GENERAL NOTE: DD Forms 1391 are provided where available. Some projects have not been defined to the DD Form 1391 level of detail.

QUESTION: Which, if any, of these projects could be accelerated into fiscal year 1988 or fiscal year 1989?

ANSWER: Insufficient project designs and land acquisitions prevent acceleration of additional Army and Air National Guard projects other than those currently requested for Fiscal Year 1989. Had additional funding authority been available, the Parkersburg USARC/OMS and AMSA project could have been executed in Fiscal Year 1989.

1 COMPONENT ARNG	FY 19 89 MILITARY CONSTRUCTION PROJECT DATA	2. DATE 5 FEB 1988

3. INSTALLATION AND LOCATION CAMP DAWSON (KINGWOOD), WEST VIRGINIA	4. PROJECT TITLE TRAINING FACILITIES PHASE II

5 PROGRAM ELEMENT 55896A	6. CATEGORY CODE 720	7. PROJECT NUMBER 1143	8. PROJECT COST ($000) 2,237

9 COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT COST	COST ($000)
PRIMARY FACILITY				2,012
BARRACKS (420 PERSON)	SF	34,558	45.47	(1,571)
DINING FACILITY (250 PERSON)	SF	4,923	64.29	(317)
SUPPLY/RATION BREAKDOWN BUILDING	SF	2,448	50.64	(124)
SUPPORTING FACILITIES				90
SITE PREPARATION	LS	-	-	(22)
FINE GRADING, SEEDING & PLANTING	LS	-	-	(8)
SIDEWALKS	SF	5,050	2.57	(13)
FLEXIBLE PAVING	SY	1,300	11.54	(15)
UTILITIES: WATER, SEWER, ELECTRIC	LS	-	-	(32)
SUBTOTAL				2,102
CONTINGENCY (5%)				105
SUPERVISION,INSP&OVERHEAD-FED (1.37%)				30
TOTAL REQUEST				2,237
EQUIP PROVIDED FROM OTHER APPR.........NON ADD				(20)

10. DESCRIPTION OF PROPOSED CONSTRUCTION

Specially designed heated facilities of permanent masonry type construction, concrete block units and concrete floors. The proposed barracks will be 2-story structures and the supply/ration building will be a 1-story structure with wooden roof trusses, sheating and asphalt shingles. All structures contain mechanical and electrical equipment that will utilize the most economical source of energy at this site. Utility connections are included in this project.

Air Conditioning: None

11. REQUIREMENT: 41,929 SF ADEQUATE: 0 SF SUBSTANDARD: 2,840 SF

PROJECT: This project will support units of the West Virginia Army National Guard to perform their required training.

REQUIREMENT: This project is requested to provide the Army National Guard and other Reserve Component troops 41,929 SF of space to perform their assigned mission. The training, housing and administrative space is the minimum essential area to effectively train and accomplish the combat readiness objectives of these units.

CURRENT SITUATION: The existing facilities for enlisted personnel (E6 - below) currently lack meeting the number of billet spaces needed to house the training site sizing of Camp Dawson. Camp Dawson is currently sized for 1000 troops and is also unable to feed this many personnel with the currently existing facilities. Battalion supply and breakdown functions are presently being conducted in a 1,600 SF structure constructed in 1922. This facility does not provide adequate cold storage and does not have adequate space for this function but will continue to be used as a warehouse.

IMPACT IF NOT PROVIDED: Fuel costs will increase and training time will decrease due to the travel time incurred in transporting troops to other training locations.

1. COMPONENT ARNG	FY 19 89 MILITARY CONSTRUCTION PROJECT DATA	2. DATE 5 FEB 1988

3. INSTALLATION AND LOCATION CAMP DAWSON (KINGWOOD), WEST VIRGINIA	4. PROJECT TITLE TRAINING FACILITIES PHASE III

5. PROGRAM ELEMENT 55896A	6. CATEGORY CODE 720	7. PROJECT NUMBER 1145	8. PROJECT COST ($000) 1,474

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT COST	COST ($000)
PRIMARY FACILITY............................				1,303
BARRACKS (210 PERSON)......................	SF	18,343	38.00	(697)
DINING FACILITY............................	SF	5,099	66.00	(337)
TROOP MEDICAL CLINIC.......................	SF	3,592	75.00	(269)
SUPPORTING FACILITIES.......................				73
SITE PREPARATION...........................	LS	-	-	(24)
GRADING & SEEDING..........................	LS	-	-	(3)
SIDEWALKS..................................	SF	3,000	1.75	(5)
PAVING: FLEXIBLE...........................	SY	1,725	10.00	(17)
UTILITIES: WATER, SEWER, ELEC, OIL........	LS	-	-	(24)
SUBTOTAL....................................				1,376
CONTINGENCY (5%)............................				69
SUPERVISION,INSP&OVERHEAD-FED (2.0%)........				29
TOTAL REQUEST...............................				1,474
EQUIP PROVIDED FROM OTHER FED APPR....NON ADD				(8)

10. DESCRIPTION OF PROPOSED CONSTRUCTION

Is a specially designed heated/insulated facility of permanent masonry type construction, concrete block units and concrete floors. The barracks will be a 2-story structure with built-up roof. The dispensary will be a 1-story structure with wood roof trusses, sheating and asphalt shingle roof. All structures will contain mechanical and electrical equipment that will utilize the most economical source of energy at the site. Utility connections are included in this construction.

Air Conditioning - 7 1/2 Tons (Dispensary)

11. REQUIREMENT: 27,034 SF ADEQUATE: 0 SF SUBSTANDARD: 2,840 SF

PROJECT: This project will support the units of the West Virginia ARNG to perform the training requirements for Reserve Components.

REQUIREMENT: This proposed project is requested to provide 27,034 SF of required space to permit the unit personnel authorized to perform the assigned mission. This training, housing and administrative space is minimum essential areas to effectively train and accomplish the combat readiness objectives.

CURRENT SITUATION: Existing facility for enlisted quarters (E6 - below) consists of 8,120 SF of space for 106 personnel. An additional 14,188 SF will be provided in Phase I to accommodate 165 personnel. Existing dining facility consists of 7,027 SF which will accommodate 500 personnel. The present dispensary consists of 1,240 SF which is inadequate. Battalion supply and breakdown functions are presently being conducted in a 1,600 SF structure constructed in 1922. This facility does not provide adequate cold storage and does not have adequate space for this function, however it will continue to be used as office space.

IMPACT IF NOT PROVIDED.: Fuel costs will increase and training time will decrease due to the travel to other training areas because of the limited training facilities available.

1. COMPONENT ARNG	FY 1989 MILITARY CONSTRUCTION PROJECT DATA	2. DATE 5 FEB 1988

3. INSTALLATION AND LOCATION PARKERSBURG, WEST VIRGINIA	4. PROJECT TITLE ARMY AVIATION SUPPORT FACILITY (AASF)

5. PROGRAM ELEMENT 55896A	6. CATEGORY CODE 211	7. PROJECT NUMBER 621	8. PROJECT COST ($000) 5,048

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT COST	COST ($000)
PRIMARY FACILITY				2,892
ARMY AVIATION SUPPORT FACILITY	SF	46,432	60.20	(2,795)
FLAMMABLE MATERIAL BUILDING	SF	440	53.00	(23)
CRASH RESCUE VEHICLE BUILDING	SF	660	56.00	(37)
GROUND SUPPORT EQUIPMENT BUILDING	SF	660	56.00	(37)
SUPPORTING FACILITIES				1,851
SITE PREPARATION	LS	-	-	(75)
RIGID PAVEMENT	SF	278,748	3.00	(836)
FLEXIBLE PAVEMENT	SY	15,600	9.00	(140)
DOUBLE BITUMINOUS SURFACE TREATMENT	SY	9,028	6.00	(54)
FUEL DISPENSING SYSTEM	LS	-	-	(200)
SIDEWALK	SF	1,800	1.50	(3)
AIRCRAFT OPEN STORAGE	SY	211	7.50	(2)
FENCING	LF	4,973	10.00	(50)
SITE WORK, GRADING, SEEDING, PLANTING	LS	-	-	(33)
UTILITIES, LIGHTING	LS	-	-	(423)
AIRCRAFT WASH PAD	LS	-	-	(35)
SUBTOTAL				4,743
CONTINGENCY (5%)				237
SUPERVISION, INSP&OVERHEAD-FED (1.37%)				68
TOTAL REQUEST				5,048
EQUIP PROVIDED FROM OTHER FED APPR......NON-ADD				(8)

10. DESCRIPTION OF PROPOSED CONSTRUCTION
A specially designed facility of permanent masonry type construction of fluted and textured concrete block units, with a built up roof and concrete floors. Supporting facilities include an aircraft wash pad, aircraft open storage, fuel dispensing system, public parking and the necessary utilities.
Air Conditioning: 23 Tons

11. REQUIREMENT: 48,192 SF ADEQUATE: 0 SF SUBSTANDARD: 9,527 SF

PROJECT: A new facility is requested to provide storage, maintenance and training in support of the West Virginia Army National Guard aviation units. The project will permit the units to improve their maintenance and training requirements and by so doing also improve their readiness posture.

REQUIREMENT: This facility is required to maintain aircraft assigned to the West Virginia Army National Guard. This facility will provide the necessary space to perform required maintenance, training, storage and administrative functions. The existing structure will be utilized for other Army National Guard purposes.

CURRENT SITUATION: The present structure was constructed in 1959 and expanded in 1971. An increase in manning strength has created over-crowded conditions resulting in a loss of efficiency. The height of existing hangar doors is far below acceptable minimums for safe operation of UH-1 or UH-60 helicopters. Aircraft parking is inadequate with 50 percent of them being parked on a grass parking area.

1 COMPONENT ARNG	FY 19 89 MILITARY CONSTRUCTION PROJECT DATA	2 DATE 5 FEB 1988
3 INSTALLATION AND LOCATION PARKERSBURG, WEST VIRGINIA		
4 PROJECT TITLE ARMY AVIATION SUPPORT FACILITY (AASF)		5 PROJECT NUMBER 621

IMPACT IF NOT PROVIDED: Assigned personnel will be required to continue maintaining aircraft in inadequate shop and storage areas. These conditions will continue to have an adverse effect on aircrew members and pilot morale, affecting the recruiting and retention of personnel and restricting the unit's mission essential training.

1. COMPONENT USAR	FY 19 90 MILITARY CONSTRUCTION PROJECT DATA	2. DATE Mar 88

3. INSTALLATION AND LOCATION USAR Center, Parkersburg, WV	4. PROJECT TITLE 200-Mbr USARC w/OMS/AMSA

5. PROGRAM ELEMENT 55994A	6. CATEGORY CODE 171-40	7. PROJECT NUMBER CAR 89-0454	8. PROJECT COST ($000) 3,306

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT COST	COST ($000)
PRIMARY FACILITIES:				2149
Training Building	SF	17229	74.00	(1275)
Maintenance Building	SF	12486	70.00	(874)
SUPPORTING FACILITIES:				610
Site Preparation	LS			(119)
Site Improvement	LS			(142)
Parking	SY	10320	17.00	(175)
Telecommunications	LS			(56)
Exterior Lighting	LS			(12)
Utilities	LS			(102)
Fencing	LS			(4)
TOTAL CONSTRUCTION COST				2759
Contingencies (5%)				138
Supervision and Administration (5.5%)				159
Site Acquisition (10 acres)				250
TOTAL PROJECT COST				3306

10. DESCRIPTION OF PROPOSED CONSTRUCTION
This project will provide a permanent facility of masonry type construction consisting of brick and concrete masonry unit walls, built-up roof, and concrete floors. Mechanical and electrical systems as well as building construction will be energy efficient. Maintenance facility will consist of similar type construction. Air Conditioning: 12 tons.

11. REQUIREMENT: 29,715 SF. Adequate: 0 SF. Substandard: 0 SF.
PROJECT: Construct a Reserve center with organizational maintenance shop, area maintenance support activity, and parking areas.
REQUIREMENT: This project will provide adequate training and mainatenance facilities for an engineer battalion allowing them to train as an entity, to develop team work and the necessary cohesion required for mission readiness.
CURRENT SITUATION: Current facility is a Government-owned Reserve center occupied by Company C, 463rd Engineer Battalion. This facility does not provide the minimum, sufficient space for administrative, instructional, assembly, storage, or maintenance function requirements of the Army Reserve. The existing 3.5 acre site will not accommodate expansion of the existing facility.
IMPACT IF NOT PROVIDED: The Reserve units will not be able to properly conduct training and maintenance to be prepared to meet their readiness and mobilization missions with the continued use of substandard facilities.

1 COMPONENT ANG	FY 1990 MILITARY CONSTRUCTION PROJECT DATA	2 DATE 23 MAR 1987

3 INSTALLATION AND LOCATION YEAGER AIRPORT CHARLESTON, WV	4 PROJECT TITLE SECURITY POLICE ADDITION/ ALTERATION

5 PROGRAM ELEMENT 55294F	6 CATEGORY CODE 730-835	7 PROJECT NUMBER 41300	8 PROJECT COST ($000) 250

9 COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT COST	COST ($000)
SECURITY POLICE ADDITION	SF	2,000	76	152
SECURITY POLICE ALTERATION	SF	1,500	20	30
SUPPORTING FACILITIES				45
Electrical, Water, Gas Extensions	LS			(13)
Site Preparation	LS			(13)
Asphalt Paving	LS			(10)
HVAC Extensions	LS			(5)
Security Lighting	LS			(4)
SUB-TOTAL				227
CONTINGENCIES (5%)				11
TOTAL CONTRACT COST				238
SUPERVISION, INSPECTION & OVERHEAD (5%)				12
TOTAL REQUEST				250

10 DESCRIPTION OF PROPOSED CONSTRUCTION

Extend existing pre-engineered steel structure, extend utilities into new addition, create additional office space, classrooms and storage, reestablish sidewalks and asphalt paving.

AIR CONDITIONING: 15 tons

11. REQUIREMENT: 5,500 SF ADEQUATE: 2,000 SF SUBSTANDARD: 1,500 SF

PROJECT: Extend existing pre-engineered steel structure by an additional 2,000 SF.

REQUIREMENT: A suitably sized facility is required to house all related functions of Law Enforcement and Combat Security.

CURRENT SITUATION: The existing facility was constructed in 1980 and was adequate to house all related functions authorized at that time. Since then the mission of the Security Police has undergone considerable modification and expansion. Authorized strength has gone from less than 30 personnel to 52. Effective in FY 87, strength will increase to 66 personnel. Due to extremely overcrowded conditions within the structure, some assets are stored in remote facilities and outside where they are exposed to the elements. Creative personnel scheduling is required to utilize all personnel effectively.

IMPACT IF NOT PROVIDED: The efficiency and ability to respond promptly and correctly by the Security Forces will continue to be suspect given their overcrowded working environment.

1. COMPONENT ANG	FY 1989 MILITARY CONSTRUCTION PROJECT DATA (computer generated)	2. DATE FEB 1988

3. INSTALLATION AND LOCATION YEAGER APT WEST VIRGINIA	4. PROJECT TITLE ADD TO AND ALTER JET FUEL STORAGE COMPLEX

5. PROGRAM ELEMENT 55294F	6. CATEGORY CODE 124-135	7. PROJECT NUMBER 41299	8. PROJECT COST($000) 1,700

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT COST	COST ($000)
ADD TO AND ALTER JET FUEL STORAGE COMPLEX	LS			1,320
ADD JET FUEL STORAGE TANKS	BL	2,500	100	(250)
ADD FUEL SYSTEMS, PUMPS, & PIPING	LS			(570)
ALTER FUEL SYSTEMS, PUMPS & POIPING	LS			(500)
SUPPORTING FACILITIES				220
UTILITIES	LS			(140)
FENCING	LS			(15)
SITE IMPROVEMENTS	LS			(65)
SUBTOTAL				1,540
CONTINGENCY (5%)				77
TOTAL CONTRACT COST				1,617
SUPERVISION, INSPECTION AND OVERHEAD (5%)				81
TOTAL REQUEST				1,698
TOTAL REQUEST (ROUNDED)				1,700

10. Description of Proposed Construction: Install underground JP-4 Fuel Storage Tanks with interconnecting piping to existing tank system; relocate security fencing and lighting; and construct shed roof addition to pump house.

11. REQUIREMENT: 5,000 BL ADEQUATE: 2,500 BL SUBSTANDARD: 0

PROJECT: Provide additional JP-4 fuel storage tanks.

REQUIREMENT: Unit is required to provide 5,000 BLS of JP-4 fuel storage for eight C-130 aircraft to meet stated operational commitments.

CURRENT SITUATION: The JP-4 fuel storage and dispensing complex was originally constructed in 1977 with a storage capacity of 2,500 BLS, which was authorized at that time. Since then, the specified fuel storage requirement for eight C-130 aircraft has increased to 5,000 BLS.

IMPACT IF NOT PROVIDED: The unit will continue to have an operational deficiency which will cause difficulties in responding to operational taksing rapidly and efficiently.

1. COMPONENT ANG	FY 1989 MILITARY CONSTRUCTION PROJECT DATA (computer generated)	2. DATE FEB 1988

3. INSTALLATION AND LOCATION YEAGER APT WEST VIRGINIA	4. PROJECT TITLE ADD TO AND ALTER SQUADRON OPERATIONS

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST($000)
55294F	141-753	41301	870

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT COST	COST ($000)
ADD TO AND ALTER SQUADRON OPERATIONS	LS			678
ADD TO SQUADRON OPERATIONS	SF	8,400	70	(588)
ALTER SQUADRON OPERATIONS	SF	6,000	15	(90)
SUPPORTING FACILITIES				110
UTILITIES	LS			(70)
PAVEMENTS	LS			(20)
SITE IMPROVEMENTS	LS			(20)
SUBTOTAL				788
CONTINGENCY (5%)				39
TOTAL CONTRACT COST				827
SUPERVISION, INSPECTION AND OVERHEAD (5.5%)				45
TOTAL REQUEST				872
TOTAL REQUEST (ROUNDED)				870

10. Description of Proposed Construction: Construct a multi-storied block and brick addition to existing facility extending utilities into the addition including minor alterations to the existing facility. Re-route sidewalks, pave surrounding area, and install security lighting.

11. REQUIREMENT: 18,934 SF ADEQUATE: 4,534 SF SUBSTANDARD: 6,000 SF

PROJECT: Construct a multi-storied addition to existing facility. Minor alterations to existing office space.

REQUIREMENT: To accomplish all related flying operations activities in a single efficient location requires a facility of 18,934 SF. The facility is needed to house base operations, squadron operations, command post, audio-visual, life support, and other related activities.

CURRENT SITUATION: The existing facility was designed in the early 1970's as a C-110 operations facility. The 130th Tactical Airlift Group has been forced to conduct their C-130 operations in a facility almost 55 percent less than authorized space. Cramped, overcrowded conditions exist for all activities. The Command Post is extremely inefficient for C-130 training operations.

IMPACT IF NOT PROVIDED: The ability of this unit to efficiently accomplish its mission will continue to be degraded and will affect its training and readiness.

1. COMPONENT ANG	FY 1991 MILITARY CONSTRUCTION PROJECT DATA (computer generated)	2. DATE 4 APRIL 88

3. INSTALLATION AND LOCATION YEAGER AIRPORT ANG WEST VIRGINIA	4. PROJECT TITLE ADD TO AND ALTER RESERVE FORCES OPS TNG

5. PROGRAM ELEMENT 55294F	6. CATEGORY CODE 171-445	7. PROJECT NUMBER LYBH889547	8. PROJECT COST($000) 1,450

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT COST	COST ($000)
ADD TO AND ALTER RESERVE FORCES OPS TNG	LS			1,016
RESERVE FORCES OPS TNG	SF	24,100	25	(603)
COMPOSITE MEDICAL FACILITY	SF	3,300	125	(413)
SUPPORTING FACILITIES				280
UTILITIES	LS			(225)
PAVEMENTS	LS			(50)
SITE IMPROVEMENTS	LS			(5)
SUBTOTAL				1,296
CONTINGENCY (5%)				65
TOTAL CONTRACT COST				1,361
SUPERVISION, INSPECTION AND OVERHEAD (5%)				68
TOTAL REQUEST				1,429
TOTAL REQUEST (ROUNDED)				1,450

10. Description of Proposed Construction: A masonry and steel addition to the existing facility to expand the medical training and administration area, and interior renovation of space including demolition of walls, new floors and ceilings, and systems furniture.

11. REQUIREMENT: 27,400 SF ADEQUATE: 0 SUBSTANDARD: 24,100 SF

PROJECT: Add to and alter the existing Operations & Training Building to provide expanded medical space and interior improvements to the space layout. Also includes repair of exterior windows, doors, and facade.

REQUIREMENT: Facility is required to house base support functions including accounting and finance, medical training, chaplain, legal, personnel, and others.

CURRENT SITUATION: The existing facility was constructed in 1951 and has not received major rehabilitation since. The interior layout no longer functions well for the assigned mission. Recent increases in medical personnel have caused severe space shortage in the medical training area. It is not feasible to expand this function within the building due to extensive mechanical work needed. In addition, the building is a heavy energy user due to the old and energy-inefficient windows and doors.

IMPACT IF NOT PROVIDED: This is the most visible facility on base due to its function. Lack of adequate functional layout and poor appearance will cause problems in recruiting and retention of personnel, ultimately degrading the unit mission. Lack of medical training space will continue to cause problems conducting physicals and in training medical personnel, affecting unit readiness. Energy-inefficient windows and doors will continue to cause excessive energy use.

1. COMPONENT ANG	FY 1989 MILITARY CONSTRUCTION PROJECT DATA (computer generated)	2. DATE FEB 1933

3. INSTALLATION AND LOCATION EWVRA-SHEPHERD FLD WEST VIRGINIA	4. PROJECT TITLE AVIONICS SHOP

5. PROGRAM ELEMENT 55294F	6. CATEGORY CODE 217-712	7. PROJECT NUMBER 40430	8. PROJECT COST($000) 740

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT COST	COST ($000)
AVIONICS SHOP	LS			561
ARMAMENT & ELECTRONICS SHOP	SF	3,400	105	(357)
NON-DESTRUCTIVE FACILITY	SF	2,400	85	(204)
SUPPORTING FACILITIES				110
UTILITIES	LS			(55)
PAVEMENTS	LS			(25)
SITE IMPROVEMENTS	LS			(20)
DEMOLITION	LS			(10)
SUBTOTAL				671
CONTINGENCY (5%)				34
TOTAL CONTRACT COST				705
SUPERVISION, INSPECTION AND OVERHEAD (5%)				35
TOTAL REQUEST				740
TOTAL REQUEST (ROUNDED)				740

10. Description of Proposed Construction: Construct concrete foundations and floor slab, masonry and metal insulated panel walls, structural steel frame with built-up roof, and all mechanical and electrical systems needed for a complete facility. Demolition of existing facility is required. Air Conditioning: 25 Tons.

11. REQUIREMENT: 5,800 SF ADEQUATE: 0 SUBSTANDARD: 2,310 SF

PROJECT: Construct composite avionics/NDI facility.

REQUIREMENT: The unit requires adequate facilities to test, maintain and repair avionics equipment and to perform NDI of aircraft components. Functional areas include administrative offices, electronic test shops, x-ray room, equipment room, dark room, rest rooms, training room, storage and building mechanical rooms.

CURRENT SITUATION: The existing facilities are not adequate. Both facilities have substandard lighting, environmental systems and electrical service, as well as less than required space. The unit robusted to 12 aircraft in 1987, which increased the number of personnel and equipment to the already overcrowded and substandard facilities. The NDI facility has deteriorated beyond economical repair, and will be demolished upon completion of this project. The avionics area is limited and cannot be expanded without impacting adjacent aircraft maintenance shops. The area vacated will be used to satisfy deficiencies in aircraft maintenance shops.

IMPACT IF NOT PROVIDED: The unit will be unable to maintain a satisfactory level of avionics and NDI support required for the mission. This will degrade training and have a negative impact on the readiness and mission accomplishment of the unit.

1. COMPONENT ANG	FY 1989 MILITARY CONSTRUCTION PROJECT DATA (computer generated)	2. DATE FEB 1988

3. INSTALLATION AND LOCATION EWVRA-SHEPHERD FLD WEST VIRGINIA	4. PROJECT TITLE RESERVE FORCES MEDICAL TRAINING FACILITY

5. PROGRAM ELEMENT 55294F	6. CATEGORY CODE 171-449	7. PROJECT NUMBER 40429	8. PROJECT COST($000) 3,000

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT COST	COST ($000)
RESERVE FORCES MEDICAL TRAINING FACILITY	LS			2,373
AEROMEDICAL EVAC FACILITY	SF	11,200	80	(896)
DINING HALL	SF	9,900	65	(644)
TELECOM CENTER	SF	7,000	80	(560)
SECURITY POLICE	SF	4,200	65	(273)
SUPPORTING FACILITIES				350
UTILITIES	LS			(140)
PAVEMENTS	LS			(75)
SITE IMPROVEMENTS	LS			(135)
SUBTOTAL				2,723
CONTINGENCY (5%)				136
TOTAL CONTRACT COST				2,859
SUPERVISION, INSPECTION AND OVERHEAD (5%)				143
TOTAL REQUEST				3,002
TOTAL REQUEST (ROUNDED)				3,000

10. Description of Proposed Construction: Construct a facility with concrete foundations and floors, masonry and metal insulated panel walls, structural steel framing with built-up roof and all necessary utilities and support.
Air Conditioning: 100 Tons.

11. REQUIREMENT: 32,800 SF ADEQUATE: 0 SUBSTANDARD: 14,346 SF

PROJECT: Construct a composite facility for aeromedical evacuation, dining hall, information systems and security police operations functions.

REQUIREMENT: The base requires adequate facilities to support the assigned functions.

CURRENT SITUATION: The existing facilities are substandard and inadequately sized for the intended purposes. The unit is robusting from 8 to 12 aircraft in 1986 and this adds to the problem. The dining hall and aeromedical evacuation do not have enough space for these functions. Training cannot be accomplished because of lack of space. The dining hall is overcrowded, creates excessive delays and does not easily lend itself to the necessary expansion. The space will be used to satisfy squadron operations deficiencies created by the unit's robusting in 1986. The telecommunications center and security police operations occupy space in a hangar which is required to support the robusting.

IMPACT IF NOT PROVIDED: The functions will continue to operate in overcrowded and inadequate facilities, degrading each unit's training, mission effectiveness and support. Over the long term, the degradation will affect the mission accomplishment. In addition, new facilities will have to be constructed to accommodate expanded squadron operations and aircraft maintenance requirements created by the robusting.

1. COMPONENT ANG	FY 1990 MILITARY CONSTRUCTION PROJECT DATA (computer generated)	2. DATE 4 APRIL 1938

3. INSTALLATION AND LOCATION EWVRA SHEPHERD FIELD WEST VIRGINIA	4. PROJECT TITLE ALTER SMALL ACFT MAINTENANCE DOCK

5. PROGRAM ELEMENT 55294F	6. CATEGORY CODE 211-177	7. PROJECT NUMBER PJVY889562	8. PROJECT COST($000) 490

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT COST	COST ($000)
ALTER SMALL ACFT MAINTENANCE DOCK	LS			385
SMALL ACFT MAINTENANCE DOCK	SF	63,500	4	(254)
RESERVE FORCES OPS TNG	SF	32,700	4	(131)
SUPPORTING FACILITIES				40
UTILITIES	LS			(20)
SITE IMPROVEMENTS	LS			(20)
SUBTOTAL				425
CONTINGENCY (10%)				43
TOTAL CONTRACT COST				468
SUPERVISION, INSPECTION AND OVERHEAD (5%)				23
TOTAL REQUEST				491
TOTAL REQUEST (ROUNDED)				490

10. Description of Proposed Construction: Interior alteration using metal doors and frames, concrete masonry units, drywall, and standard finish materials.

11. REQUIREMENT: 96,013 SF ADEQUATE: 0 SUBSTANDARD: 96,013 SF

PROJECT: Alter interiors of Buildings 110 and 120(Maintenance Hanger and Squadron Operations).

REQUIREMENT: The maintenance hangar is needed for maintenance shop supportfor assigned C-130 aircraft. The squadron operations is needed for training, flight planning, and mission support for air crews.

CURRENT SITUATION: The unit has recently increased in assigned aircraft from 8 to 12. This has caused a crowded situation in the maintenance areasand in the squadron operations. At the same time, spaces within the buildings are being vacated with the completion of the new Avionics/NDI andOperational Training facility. Specific spaces being vacated include avionics, dining hall, aeromed area, security police, and telecommunicationarea. Without alteration, these spaces are virtually useless. With alteration, the space can be adapted to resolve the space deficiencies.

IMPACT IF NOT PROVIDED: Continued use of overcrowded facilities while adequate space sits empty but unuseable.

1 COMPONENT ANG	FY 1990 MILITARY CONSTRUCTION PROJECT DATA	2 DATE 23 MAR 1987

3 INSTALLATION AND LOCATION EASTERN WV REGIONAL AIRPORT (ANG) MARTINSBURG, WV	4. PROJECT TITLE ADD/ALTER JET FUEL STORAGE

5 PROGRAM ELEMENT 55294F	6 CATEGORY CODE 411-135	7 PROJECT NUMBER 40433	8 PROJECT COST ($000) 3,000

9 COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT COST	COST ($000)
JET FUEL STORAGE				2,400
Fueling Systems and Piping	LS			(1,635)
Storage Tanks	BL	15,000	46	(690)
Refueler Vehicle Parking	LS			(75)
SUPPORTING FACILITIES				321
Roads, Walks and Parking	LS			(120)
Demolition and Site Restoration	LS			(95)
Site Preparation				(56)
Electrical				(50)
SUB-TOTAL				2,721
CONTINGENCIES (5%)				136
TOTAL CONTRACT COST				2,857
SUPERVISION, INSPECTION & OVERHEAD (5%)				143
TOTAL REQUEST				3,000

10 DESCRIPTION OF PROPOSED CONSTRUCTION

Construct above-ground JP-4 storage tanks with concrete foundations, dike, floating cone roof, epoxy lined, dispensing hydrants, pumping station, piping, safety devices, refueler vehicle parking and associated pavements. Includes demolition and site restoration of existing underground storage tanks and dispensing equipment.

AIR CONDITIONING: 0 tons

11. REQUIREMENT: 15,000 BL ADEQUATE: 0 BL SUBSTANDARD: 2,380 BL

PROJECT: Construct 15,000 BL above-ground tank farm and associated facilities and demolish existing underground tank storage area. Construct refueler vehicle parking.

REQUIREMENT: The unit requires 15,000 BL storage capacity to support its training and mission responsibilities.

CURRENT SITUATION: The existing tanks provide only 16 percent of the needed storage capability. This lack of on-base storage requires daily fuel deliveries, which requires unnecessary manpower expenditures and increases the risk of accident. The lack of adequate storage capacity hampers the quick turn of aircraft and the ability to surge. The facility also lacks current safety and environmental protection items. The existing site is severely constrained and does not lend itself to expansion.

IMPACT IF NOT PROVIDED: Safety will continue to be compromised. The threat of environmental pollution will continue. The training and mission accomplishment of the unit will continue to be hampered. The unit's readiness is threatened without adequate and safe on-base fuel storage.

1 COMPONENT USAFR	FY 1989 MILITARY CONSTRUCTION PROJECT DATA	2 DATE 1 JAN 88

3 INSTALLATION AND LOCATION MORGANTOWN AIRPORT WEST VIRGINIA	4 PROJECT TITLE CIVIL ENGINEERING TRAINING FACILITY

5 PROGRAM ELEMENT 55394F	6 CATEGORY CODE 171-443	7 PROJECT NUMBER QUEG 89-9001	8 PROJECT COST ($000) 600

9 COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT COST	COST ($000)
CIVIL ENGINEERING TRAINING FACILITY	SF	4,000	88.00	352
SUPPORTING FACILITIES				188
UTILITIES	LS			(97)
SITE IMPROVEMENT	LS			(27)
SPECIAL FOUNDATION	LS			(60)
SIDEWALKS AND DRIVEWAY	LS			(2)
DEMOLITION	LS			(2)
SUBTOTAL				540
CONTINGENCY (5%)				27
TOTAL CONTRACT COST				567
SUPERVISION, INSPECTION & OVERHEAD (5.5%)				31
TOTAL REQUEST				598
TOTAL REQUEST (ROUNDED)				600

10 DESCRIPTION OF PROPOSED CONSTRUCTION Construction consists of a preengineered metal structure with brick veneer, reinforced concrete slab on grade and a sloped roof. Includes supporting utilities.
Air Conditioning: 10 Tons.

11. REQUIREMENT: 4,000 SF ADEQUATE: 0 SF SUBSTANDARD: 0 SF

PROJECT: Construction of a Civil Engineer Training Facility.

REQUIREMENT: An adequately sized and properly configured facility is required to support the training of a Reserve Civil Engineering Squadron. Space is required for administrative areas, classrooms, tool storage, and mobility equipment storage. Facility should be sited to accommodate a potential future expansion of up to 2,000 SF.

CURRENT SITUATION: A Reserve Civil Engineering Squadron is being activated at this location. There is no appropriate facility available nor is any forecast to become available. Only interim rental facilities are available to conduct minimal organizational functions. An existing 600 SF wooden structure on the proposed site will be demolished as part of this project.

IMPACT IF NOT PROVIDED: Management of personnel and resources will be cumbersome and ineffective. The training environment will be counter productive and the unit's ability to augment the active force upon mobilization will be severely constrained. Security of such government resources as mobility equipment will be compromised.

GUARD AND RESERVE PROGRAMS IN WEST VIRGINIA

QUESTION: A partial list of West Virginia's military construction projects, based upon previous testimony, is included in order to aid in preparing the response. This list should be updated for the latest DoD Five Year Plan, completed, and the pertinent information provided for the record as requested.

ANSWER: The Services have provided the following Reserve and National Guard information in millions of dollars:

PROJECT NAME	FY	EST COST
Camp Dawson ARNG Trng Fac Phase II	89	2.2
Camp Dawson ARNG Trng Fac Phase III	89	1.5
Parkersburg ARNG Aviation Spt Fac	89	5.0
Yeager Airpt ANG Security Police Add/Alt	89	0.3
Yeager Airpt ANG Add/Alt Jet Fuel Stor Complex	89	1.7
Yeager Airpt ANG Add/Alt Squadron Ops	89	0.9
EWVRA-Shepherd Fld ANG Avionics Shop	89	0.8
EWVRA-Shepherd Fld ANG Res Fcs Med Trng Fac	89	3.0
Morgantown AFR Civ Eng Trng Fac	89	0.6
EWVRA-Shepherd Fld ANG Alt Small Acft Maint Dock	90	0.5
EWVRA-Shepherd Fld ANG Add/Alt Jet Fuel Stor	90	3.0
Parkersburg USARC/OMS and AMSA	90	3.3
Huntington ARNG Armory, Add/Alt	90	0.5
Camp Dawson ARNG Trng Fac Phase IV	90	0.8
Wheeling ARNG Aviation Spt Fac	90	3.8
Wheeling ARNG Armory, 100-person	90	1.5
Yeager Airpt ANG Add/Alt Res Forces Ops Trng	91	1.5
Kingwood ARNG Armory, 200-person	91	2.1
Charleston ARNG Armory, 200-person	92	1.0
Rainelle USARC/OMS	94	2.2
Kingwood USARC/OMS	94	1.4

QUESTION: For the projects which are underway or budgeted in FY 1988 or FY 1989, please provide an updated schedule, including significant milestone events, leading to full realization of the project.

ANSWER: The Services have provided the following Reserve and National Guard information:

For the Army National Guard:

FY 88, Buckhannon; OMS Alteration/Addition, Bid announcement for the project was released 16 March 1988.

FY 88, Camp Dawson; Training Facilities Phase I. Bid announcement for the project was released 8 February 1988.

FY 88, Point Pleasant Armory Alteration/Addition. Bid announcement for the project was released 29 March 1988.

FY 89, Camp Dawson; Training Facilities Phases II and III. Preliminary designs approved February 1988, with final designs scheduled by 1 August 1988 and award in March 1989.

FY 89, Parkersburg; Aviation Support Facility. Design status at 65% complete with final design scheduled by 1 May 1988 and award in February 1989.

For the Army Reserve:
FY 88, New Martinsville; Expand 25 member to 60 member U.S. Army Reserve Center (USARC) with Organizational Maintenance Shop (OMS). Construction contract awarded on March 18, 1988. Construction is expected to begin in April 1988 and will take approximately twelve months to complete.

For the Naval and Marine Corps Reserves: There are no construction projects underway or budgeted.

For the Air National Guard:
FY 87, Yeager Airport; Aircraft Parking Apron/Holding Pad. 100% designed, reprogramming requested to utilize available FY 87 military construction funds; estimated authority to bid--May 88.

FY 87, EWVRA-Shepherd Field; Shortfield runway. 99% construction complete, estimated completion date 1 May 88.

FY 87, EWVRA-Shepherd Field; Phase I Ramp Addition. 93% construction complete, estimated completion date 1 May 88.

FY 88, Yeager Airport; Fire Suppression System. Design modification required, estimated design completion 10 April 1988, estimated award date 15 July 1988, estimated construction completion date 15 July 1989.

FY 88, Yeager Airport; Vehicle Maintenance/Refueler Vehicle Shop. Estimated contract award 1 May 1988, estimated construction completion 1 May 1989.

FY 89, Yeager Airport; Security Police Addition/Alteration. 95% design due 25 May 1988.

FY 89, Yeager Airport; Add/Alter Jet Fuel Storage Complex. 95% design due 8 April 1988.

FY 89, Yeager Airport; Add/Alter Squadron Operations. 95% design due 1 May 1988.

FY 89, EWVRA-Shepherd Field; Avionics Shop. 95% design due 8 June 1988.

FY 89, EWVRA-Shepherd Field; Reserve Forces Medical Training Facility. 95% design due 10 June 1988.

For the Air Force Reserve:
FY 89, Morgantown; Civil Engineering Training Facility. Estimated design completion September 1988; estimated construction start November 1988; estimated construction completion August 1989.

QUESTIONS SUBMITTED BY SENATOR LEAHY

STATUS OF 26TH INFANTRY DIVISION

General Temple, in your March 22 letter to me, you state that "...the massive reorganization of the 26th Division, as a division total, will likely report as unready." Right now, the 26th Division has a high priority mission to reinforce US forces in Europe in the event of a Warsaw Pact-NATO conflict.

QUESTION. How can the outcome of this reorganization be that the 26th Division is reduced from a high priority mission to a low priority one and to become "unready?"?

ANSWER. The matter of the 26th Division has been of great concern to me for the past several years. The reorganization is an effort to permit the division to attain adequate strength levels to assure its ability to conduct operations. The two strongest elements will come form Vermont and Connecticut which gives the division marginal combat capability. Even after reorganization, Massachusetts officials question their ability to meet necessary strength objectives. The decision to remission the division is a conscious one in which current and short range potential for the division tells us that for the best interest of our nations war plans, and the survivability of the soldiers serving in the division, a lesser demanding mission should be given the division. The proposed mission would provide a essential security element to US contingency plans, and in addition, would afford the 26th Division time to develop a stronger division for future consideration for even more critical missions.

Vermont's 86th Armored Brigade, which has a high state of readiness and is currently converting to M60A3s, is to be reassigned to the 26th Division.

QUESTION. What is the justification for moving a highly trained unit like the 86th to the 26th Division, and then giving that Division a low priority mission and reorganizing it such that it will have an "unready" status, as your letter states the 26th Division will become?

ANSWER. The 86th Armor Brigade is adequately trained. The 26th Infantry Division could not attain required standards and had to be absorbed into the remaining division structure to approach acceptable standards. The replacement third brigade was designated as the 86th Armor Brigade due, in part, to the geographic proximity to Massachusetts. The mission change of the division is based upon time required for the unit to reorganize and modernize, and the lesser probability of employment in this new mission category versus a European mission category. The division "unready" status reflects the unit's inability to perform its current mission due to the service directed reorganization. However, the division may be directed to perform portions of a mission with the resources on hand if required. The new mission would allow for this capability with little risk to the European theater.

QUESTION. How can this have anything but a deleterious effect on the readiness, modernization, training and morale of the 86th Armored Brigade?

ANSWER. There is no evidence that the remissioning of the 86th Bde will have a deleterious effect on readiness. Training standards would remain high and modernization would proceed. Overseas training would still be afforded division members through staff exercises and KPUP. Opportunities for education would not be curtailed.

QUESTION. Are there alternatives available for maintaining the 86th Armored Brigade in a high priority status for reinforcement in a NATO-Warsaw Pact conflict? Have these alternatives been considered, and if so, with what results?

ANSWER. European alignment, perhaps, could be maintained if the 86th Brigade were a separate brigade. However, the result would be costly and not be based on a requirement. The CINC requirement is for a division, not a separate brigade.

M60A4 UPGRADE PROGRAM

QUESTION. General Temple, what are the plans for using the $90 million Congress appropriated last year to upgrade the M60A3?

ANSWER. The $90 million was appropriated specifically to fund approved product improvement program (PIP) items for the M60A3. Funding for the M60A4 was not appropriated and would require research, development, testing and evaluation (RDT&E) funds rather than procurement funds. Currently, the $90 million has not been authorized, pending decisions on continued Abrams procurement.

QUESTION. Do you know why it has not yet been released for obligation?

ANSWER. The funds have not been released for obligation because the authorization has not been granted.

QUESTION. What does the Guard Bureau believe is the right solution to modernizing its inadequate M60 fleet?

ANSWER. The ability of our armor force to fight and win on the modern battlefield is absolutely dependent upon being equipped with the best tank available in the Army's inventory. That tank is the Abrams. The M60A4 is, perhaps, an improvement over the M60A3, but is still short of the capabilities of the Abrams.

QUESTION. How much more time can we afford to waste before we start doing something feasible about modernizing Guard armor?

ANSWER. The Army staff is currently working to extend the procurement of the Abrams by almost 3,000 tanks. This extension is required if the Army National Guard is to be fully modernized. This modernization should begin as soon as possible.

QUESTION. What is the Guard Bureau's view of the plan to test some prototypes of an M60A4, and to upgrade the Guard's M60s to that configuration if it proves successful?

ANSWER. The Guard must have the best tank available and the M60A4 is still short of the capabilities of the Abrams. The M60A4 would only provide some improvement to Guard units. The Army's plan to provide 3,000 additional Abrams tanks, on the other hand, will upgrade the existing Abrams fleet and provide POMCUS equipment.

QUESTION. My information is that that program could cost some $3 billion and reequip the 60 Guard armor battalions before the end of the century. Do you think that is accurate?

ANSWER. The $3 billion seems low, particularly since I do not believe that this includes sufficient funds for testing or fielding. However, there has not, to my knowledge, been a detailed analysis of the required resources.

QUESTION. What would be the Guard Bureau's position on an amendment to this year's defense appropriation directing the Army to spend the $90 million already appropriated to build some M60A4 prototypes and to test them, if the Army still has not released or obligated those funds by the time this Committee marks up the FY89 Defense Appropriations bill?

ANSWER. The Guard Bureau would prefer that the funds be directed toward the purchase of additional Abrams tanks so that modernization with the best tank can continue.

QUESTIONS SUBMITTED BY SENATOR WEICKER

ARNG HELICOPTER PROGRAM

QUESTION. What is the possibility of fulfilling the AVCRAD's requirement for two UH-60As in FY 1989?

ANSWER. The priorities for establishing aircraft distribution are based on the first to deploy philosophy. Of the four Army National Guard AVCRADs, only the Missouri organization has an overseas deployment mission. Based on deployment priorities, the current UH-60A distribution plans do not include the non-deploying units. Nevertheless, the need to train hard skill UH-60A maintenance skills has been recognized. The Guard is able to achieve this training for the AVCRAD through a training arrangement involving the Army's Depot Systems Command and the manufacturer.

QUESTION. What is the Army National Guard's requirement for UH-60A helicopters in FY 1989?

ANSWER. The Army National Guard is programmed to receive 23 UH60As in FY 89. This will provide a end of FY 89 total of 68 aircraft against a documented requirement of 93 based on the current MTOE/TDA. The total requirement is 894 UH-60A aircraft.

QUESTION. What is the Army National Guard's total requirement for UH-60A helicopters?

ANSWER. The total requirement for UH-60A helicopters is 983 including operational float.

QUESTIONS SUBMITTED BY SENATOR LEAHY

GUARD AIR DEFENSE MISSION

QUESTION: General Temple, while I of course greatly appreciate the assurance in your letter to me of March 22 that no changes are planned for the Vermont Air Guard's air defense mission, I am still concerned about plans to cut back on the air defense mission of Guard squadrons in the northern tier of states. Are such cutbacks planned, and if so, what states will be affected, which units, and under what rationale?

GENERAL TEMPLE: While the status of northern tier alert sites have enjoyed a high degree of stability over the last few years, the command structure for which they operate has, in effect, changed. Because of this, the northern tier alert system is currently under review by the Air Force.

QUESTIONS SUBMITTED BY SENATOR McCLURE

AIR NATIONAL GUARD FORCE STRUCTURE

QUESTION: The latest Air Force Structure released effectively eliminated one Air Guard RECON squadron (Kentucky), by reassigning the mission to TAC airlift (C-130). Are more cuts in the Air NG RECON capability projected in the future? Will the Idaho Air NG RECON capability be cut?

GENERAL CONAWAY: No. Additional cuts to the Air National Guard reconnaissance capability are not projected in the future.

FORCE STRUCTURE AND MODERNIZATION

QUESTION: What impact on the force structure and modernization of the Army Reserve and ANG does the active Army project for FY 89, if any?

ANSWER: Force structure changes imposed on the active Army (equipment and personnel) will impact the Army Reserve. As force reductions continue in the Active Component, the Army Reserve is experiencing a reduction of programmed growth, including full-time manning. This may require some difficult decisions regarding the activation of new units which provide support critical to the warfighting commanders-in-chief.

For FY 89, we have opted to continue the USAR force modernization program. We will execute the majority of force structure actions by accepting some hollowness in the force for the immediate future, rather than cause excessive turbulence. However, if there is no AGR and no paid drill growth, we will be forced to consider relocation, consolidation and/or inactivation of existing units, based on force priorities, unit status and demographic factors, in order to activate the critical new units. In this way, we could make the best use of resource shortages in supporting the required force for our warfighting CINC's.

Budgetary reductions in the equipment modernization arena affect the Army Reserve twice. First, when new equipment buys are cancelled, there is a direct impact on USAR units; then, there is an indirect impact when the Active Component must retain its older equipment rather than "retrograde" it to the Guard or Reserve. The result of all these actions is that many Army Reserve units are not adequately supplied with mission essential items of equipment (e.g., aircraft, vehicles, radio, medical, maintenance and test equipment).

QUESTION. What impact on the force structure and modernization of the Army Reserve and ARNG does the active Army project for FY 89, if any?

ANSWER. The only identified impacts on FY 89 ARNG force structure are the addition of the infantry battalion in Alaska for the 6th Infantry Division and the replacement of the Roland battalion in New Mexico with a Chaparral battalion. There are no identified impacts on modernization in FY 89. Equipment being delivered has been already procured with funds from previous years.

M-1 TANK FIELDING

QUESTION. What is the schedule for the Guard to receive M-1 tanks? Which units are projected to receive the M-1 in FY88, 89, and 90?

ANSWER. The only units in the ARNG remaining to be fielded are the 256th Armor Brigade, LA, and the 2-152 Armor Battalion, AL, both roundout to the 5th Infantry Division (Mechanized). This fielding will occur in FY 89.

QUESTION. As the Guard transitions to the M-1, where will M-1 crew and commander training take place?

ANSWER. Training takes place primarily at the unit locations conducted by personnel from the Armor School, Fort Knox, Kentucky.

ARNG HELICOPTER PROGRAM

QUESTION. What is the schedule for the Guard to receive Apache attack helicopters?

ANSWER. The current Army Apache fielding plan indicates the fielding of an AH-64 battalion in North Carolina in FY 88, in South Carolina in FY 89 and projects a third battalion in FY 90 in Florida. FY 88 Congressional direction requires the Army to field a fourth battalion to ARNG. This battalion will be split between Texas and Utah.

QUESTION. What effect will the change in the army's attack helicopter program contained in the budget request have on the Guard's acquisition of Apaches?

ANSWER. The Army's FY 89 budget request envisions 72 additional Apaches that will be distributed to active Army attack helicopter battalions. It is anticipated that this will free AH-1 Cobras for ARNG attack battalions.

QUESTIONS SUBMITTED BY SENATOR D'AMATO

AIRCRAFT CONVERSION OF THE 107TH FIGHTER INTERCEPTER GROUP

QUESTION: I understand there are plans to convert the 107th Fighter Intercepter Group (FIG) at Niagara Falls from F-4 and F-16s. I also understand that there are F-15s coming into the Air Guard inventory and there are plans to convert an F-16 group to F-15s. Since the F-15 is a proven cold-weather aircraft, wouldn't it be more cost-effective to change the Niagara Falls Fighter Intercepter Group to F-15s instead of F-16s?

GENERAL CONAWAY: The F-16 is designed and built to withstand extreme temperature conditions, as are all modern aircraft. The F-15 would have no advantage over the F-16 in the winters of Niagara Falls, NY.

FUNDING FOR AIR ALERT DETACHMENT AT NIAGARA FALLS

QUESTION: Has the Air Force decided to delete funding for the air alert detachment at Niagara Falls? If so, how do you expect to have this mission replaced?

GENERAL CONAWAY: No funding has been deleted in home base alert commitments.

WAR ON DRUGS

QUESTION. General Temple, I am happy to hear of the involvement of the Army and Air National Guard in assisting federal, state, and local agencies in the war on drugs. By assisting these agencies you are playing a crucial role in the defense of our nation. Are there any plans to allocate additional resources to this endeavor?

ANSWER. Over the last several years, National Guard assistance in the area of drug enforcement and eradication has increased dramatically. Since the inception of support to these programs, National Guard personnel participated either in State Active Duty status (with the individual states bearing the costs) or incidental to scheduled training on a non-interference basis (using federal resources). Some additional funds were appropriated by the Congress in FY 87 for increased National Guard assistance, but were all in the Operations and Maintenance appropriation. To be fully effective in the drug support role, the National Guard requires funding in the respective Army and Air military personnel appropriations, in addition to the Operations and Maintenance appropriations. As more states become involved in the war against drugs, the National Guard expects to continue to increase support to these programs. Every effort will be made to honor each request with maximum support, consistent with the maintenance of wartime readiness and the availability of resources.

ARMY RESERVE

QUESTION: Yesterday we heard General Vuono and Secretary Marsh speak of a reduction in strength in Western Europe, mainly of soldiers responsible for the operation of medium-range strategic systems. Are there any plans to increase Reserve and National Guard training in Western Europe to enhance our deterrent posture? This is especially important because of the probable ratification of the INF Treaty and the increased role of our conventional force structure.

ANSWER: Under the present Overseas Deployment Training (ODT) program we are conducting all missions that can be accomplished by the United States Army Reserve (USAR). With additional funding these programs can be expanded. The present concept of ODT allows units to be rotated into Europe and other theaters to train/support in accordance with CAPSTONE mission alignment. The program is planned for five years and generally executed in three year rotations.

Presently, some units already programmed for ODT are being deleted from the plan due to funding decrements. To allow for maximization of the fiscal year 88 ODT plan, a plus-up of $17 million is needed. For fiscal year 89 the same budget shortfall exists. The current ODT program has been carefully prioritized given other vital training objectives to the USAR. There are no funds that can be reprogrammed to ODT in this constrained environment. Any expansion of the program can only be accomplished with additional funding in concert with the three year rotational cycle.

OVERSEAS DEPLOYMENT TRAINING

QUESTION. Yesterday we heard General Vuono and Secretary Marsh speak of a reduction in strength in western Europe, mainly of soldiers responsible for the operation of medium-range strategic systems. Are there any plans to increase Reserve and National Guard training in western Europe to enhance our deterrent posture? This is especially important because of the probable ratification of the INF Treaty and the increased role of our conventional force structure.

ANSWER. As requested by the Senate last year a joint study is currently being conducted to determine the feasibility of placing Reserve Component troops in Europe on a rotational basis. These troops would replace Active Component troops. This would be accomplished by maintaining a small full-time cadre and utilizing Reserve Component troops attending annual training to both train and perform a vital mission at the same time. This study is being staffed and is due to the Congress on May 1, 1988.

The Key Personnel Upgrade Program has been established for several years and provides the opportunity for many Guardsmen to train in Europe. These individuals not only improve their individual skills, but have the opportunity to work along side their Active Component counterparts.

Beginning this year, the ARNG will have aviation units performing annual training in Europe. They will be using aircraft designated as theater reserves.

Each of these activities provides or will provide valuable training in which the individuals or units perform a vital function in enhancing our deterrent posture.

ARMY RESERVE

QUESTION: General Ward, at current funding levels will we be able to maintain our readiness and mobilization status with the added importance given to conventional forces through the INF Treaty?

ANSWER: Current funding levels are constrained and will be severely so in fiscal year 89. Unit readiness will remain the top priority and to that extent we will sustain these units. For this reason, the fiscal impact to the Army Reserve would not be immediately reflected in unit readiness reports. Funding reductions are being applied in areas where there can be a great deal of subjectivity as to an immediate readiness impact. For example, annual mobilization training for the Individual Ready Reserve (IRR) has always been somewhat subjective. Annually we train a percentage of this 300,000 soldier manpower pool. Mobilization Power (MOBPOWER) provides us an annual objective but the immediate readiness impact of training a few more or less is impossible to quantify. Therefore, budget cuts most frequently impact in this area. This is an acceptable strategy as long as it remains occasional with compensation in succeeding years. Faced with successive year application of this strategy, I can tell you that mobilization readiness of the IRR will ultimately be affected over time.

Another similar example applies to our effort to provide CAPSTONE units Overseas Deployment Training (ODT) opportunities on a three to five year cycle depending on operation plan (OPLAN) deployment day criteria. While the benefits of ODT are obvious, how does one measure the readiness benefit of ODT vice conducting annual training (AT) in Continental United States (CONUS)? Over the short term, delaying ODT may be acceptable as long as we ultimately get back in cycle. Over an extended period, delayed or cancelled ODT will ultimately impact readiness. There are unfinanced ODT requirements in fiscal year 88 and the same is anticipated in fiscal year 89. The effort is to minimize the readiness impact by prioritizing fund expenditures. The readiness risk is directly proportional to the number of years we are forced to operate at constrained funding levels.

QUESTIONS SUBMITTED BY SENATOR COCHRAN

EQUIPMENT

QUESTION: We are pleased to welcome you in your first appearance before this committee. As you have indicated in your statement, the growth in size and responsibility of the Reserve components of our armed services is significant. With the overall funding constraints for this year and the foreseeable future, I would expect increasing reliance on the Guard and Reserves. With this is mind, there is one item which concerns me. Last year, at this same hearing, I questioned the disparity among the procurement figures among various components. This year, rather than having developed a better means of presenting the information, you indicate in your statement that the procurement estimates are not obtainable by component. You have a good story to tell, and I am convinced that the full picture of the costs of the Reserve components would help you tell it. Could you provide these costs for the record, and highlight at this time how you are working to develop these estimates.?

ANSWER: Procurement estimates for the Reserve Components are provided by the Department of Defense to the Congress each year in the "Procurement Programs (P-1R)" report. Planned FY 1989 procurement expenditures for each of the Reserve Components are summarized below:

($'s in Millions)

COMPONENT	AMENDED FY-89
ARNG	$1003.5
USAR	275.9
	1279.4
ANG	657.3
USAFRES	211.6
	868.9
USNR	145.6
USMCR	43.5
	189.1
TOTAL GUARD AND RESERVE	$2337.4

After the budget summit agreements for the Department of Defense were reached in November, fiscal targets were passed to the Services. Within these fiscal targets, the Services apportioned available resources to maximize Total Force capabilities while attempting to optimize the balance between competing priorities for readiness, sustainability, modernization, research and development, etc. This balancing process provides the basis for the breakout of the Department's procurement program as reflected in the P-1 and P-1R reports. The official estimates for procurement, by component, were not available prior to the submission of my statement for the record.

QUESTIONS SUBMITTED BY SENATOR MCCLURE

GUARD/RESERVE LOSS OF TACTICAL AIRCRAFT

QUESTION: The revised FY 89 budget projects a loss of 75 TAC aircraft over the next three years for guard and reserves. Most of these units were increased over the past few years to current strength as the most cost-effective way of producing the most bang for the buck. I know the active establishment must respond to the revised budget for FY 89. I question the wisdom however of: (a) cutting this most cost effective Air Force combat capability for guard and reserve (b) further reducing the opportunity to absorb pilots (and other talented personnel), when the active forces are projecting the need for bonuses and increased training dollars to maintain and support a viable pilot force. Please explain the rationale for these particular decisions. What other options were considered?

ANSWER: These reductions were programmed to maintain the current active to Guard/Reserve fighter force structure mix at approximately 2/3 - 1/3. This mix has evolved with the total force concept from the early 1970s and is the result of many long-term factors interacting to establish the force structure mix at an equilibrium of about 2/3 active to 1/3 Guard/Reserve forces. Some of these factors are: active forces' Continental U.S. (CONUS)/Overseas balance, operational tradeoffs, personnel turbulence, force structure programming and dollar savings. In order to support our national forward deployed strategy, overseas active duty units are required. Correspondingly, active CONUS forces are needed to support training requirements, provide a rotation base to keep overseas tour length and numbers at a reasonable level, and to respond to contingencies where it may not be appropriate to use the Air Reserve forces. This balance of active CONUS/overseas forces has proven to be critical and there are serious implications if it is upset. Not only will overseas tours per individual increase, but history reflects a definite negative pilot retention impact when frequency of overseas tours increase. In summary, to meet and maintain the current level of commitment to our national strategy of forward deployed forces while maintaining an acceptable quality of life for our active duty personnel, the Air Force spread its force structure reductions across the total force.

SUBCOMMITTEE RECESS

Senator PROXMIRE. As I understand it, the Chairman feels that this is the end of the hearing. It has been a very good hearing for the time I have been here.

Congratulations on the fine job you gentlemen have been doing.

The subcommittee will stand adjourned.

[Whereupon, at 11:30 a.m., Thursday, March 24, the subcommittee was recessed to reconvene at the call of the Chair.]

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